ECHO

JULY/AUGUST 2025

2025/2026 EDUCATION CALENDAR

SEPTEMBER 2025

36th Annual Scientific Sessions

September 5-7, 2025
Music City Center (Downtown)
Nashville, TN

Jointly provided by ASE and the ASE Foundation

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

JUNE 2026

SAVE THE DATE

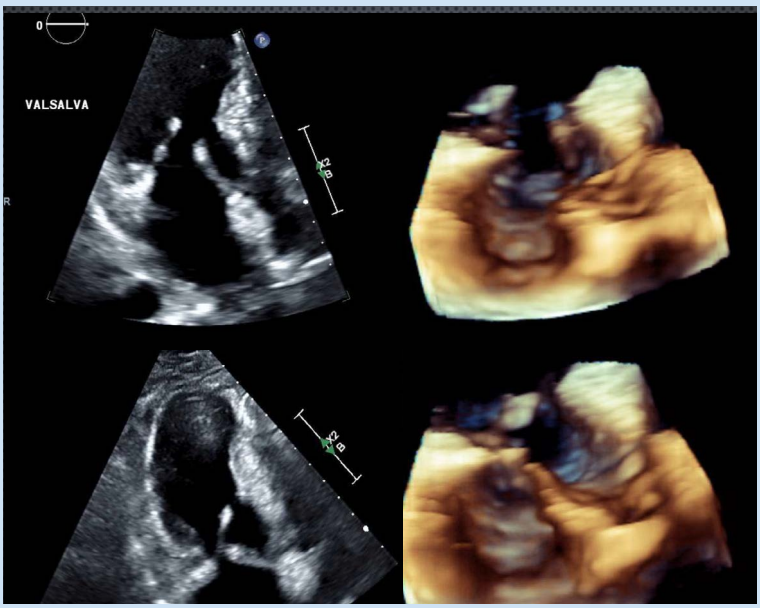
37th Annual Scientific Sessions

June 26-28, 2026
Gaylord Rockies Resort and
Convention Center, Aurora, CO

Jointly provided by ASE and the ASE Foundation

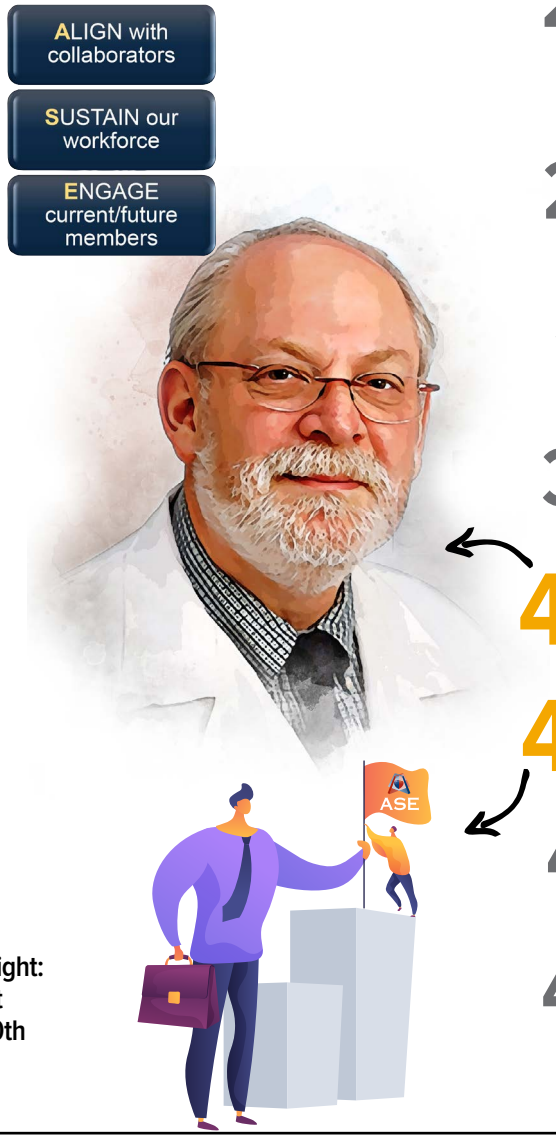
Discounted rates for ASE members. *To learn more and register, visit us at* ***ASEcho.org/Education***.

This text also appears in the July and August issues of JASE. ***OnlineJASE.com***



Posterior Leaflet SAM!
Matheus De Lima, BS, RCS, Hartford Hospital - Hartford, Connecticut

Contents



AMERICAN SOCIETY OF ECHOCARDIOGRAPHY

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American Society of Echocardiography

Cover art: "This Little Piggy" Kelly Boegel, ACS, RCCS, RCS, FASE; Hannah Hartsig, BS; Denise Fong, BSc, DMU; Megan Burrows, ADHP; and Steven Kiyokawa, RCS, 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 ***July***

ECHOING EXCELLENCE: ASE SHAPES THE FUTURE OF CARDIOVASCULAR IMAGING

Contributed by ***David H. Wiener, MD, FASE****, Director of Clinical Operations at the Jefferson Heart Institute and Clinical Professor of Medicine at Thomas Jefferson University, Philadelphia, PA.*

"If you don't know where you are going, you might end up someplace else."
–Yogi Berra

I am honored to lead the American Society of Echocardiography into its 51st year. As a cardiologist practicing general cardiology and echocardiography, ASE has been my professional home for most of my career. I am fortunate to take the helm of a strong, well-run organization with a talented professional staff and an energetic and diverse membership, and to benefit from the wisdom and foresight of those who led the way before me. This first President's Message affords me the chance to outline what I hope to accomplish this year – and to urge you to join me to make it happen.

"I am fortunate to take the helm of a strong, well-run organization with a talented professional staff and an energetic and diverse membership.

Contemporary cardiac imaging is a multi-modality "team sport." Cardiologists whose careers center on imaging train in multiple modalities and share concerns such as training guidelines, demonstrating and maintaining competence, and payment issues. I believe in the heart team concept as applying to patient care and on an institutional level: we work best, and our patients benefit, if we function as a team. Cardiac imaging, and all our professional societies, are strongest when we **align**, maintain our unique characters, and act in concert.

Carrying forward Dr. Abraham's initiative, I will lead a working group of ASE representatives who are our liaisons with other societies. Together with those partners we

will identify actionable areas for alignment such as guideline documents and best practices, registries, implementation science, and ways to coordinate memberships, scientific meetings, and certification.

A professional society's core responsibilities include developing and maintaining a vibrant workforce and ensuring the well-being of its members. Workforce challenges are obvious to anyone in healthcare. We face inadequate pipelines, work-related musculoskeletal injuries, burnout, and myriad other reasons for which professionals drop out of the patient care workforce, while faced with the needs of a growing, aging population. The U.S. Bureau of Health Workforce estimates in 2037 the supply of cardiologists and sonographers will meet only 81% and 85% of demand, respectively.

ASE is establishing a working group to find ways to build and **sustain** our workforce. How do we attract sonographers to the field and provide them with satisfying work environments and a career ladder for advancement? How do we communicate to cardiology trainees the excitement of a career in imaging? With whom can we partner in industry and academia to pioneer innovative approaches to work-related musculoskeletal injuries? How can we join with health systems to reduce burnout issues specific to imaging, improve efficiency and reduce repetitive tasks through technology and artificial intelligence? How do we provide meaningful and non-burdensome paths for training and maintenance of certification for multimodality imagers?

Attracting, **engaging**, and retaining members is critical to ASE's growth. ASE benefits from its abundance of voices, uniquely composed as we are of sonographers and physicians, including cardiologists, anesthesiologists, and veterinarians. We seek to identify and serve all users of ultrasound, such as hospital medicine specialists employing POCUS and neonatologists. Twenty percent of ASE members are from outside the USA, contributing their own special perspectives. The value proposition of ASE membership differs among elements of our constituency, and there are as well untapped wells of potential members who have yet to experience the benefits and the joy of being part of "The Society With A Soul." We will examine how to engage and demonstrate value in a granular manner to existing and potential members, and to individuals or entities in health care and industry who have not yet benefited from affiliating with our strong Society for research, education, advocacy, and, of course, optimal patient care.

These initiatives can be summarized as Align, Sustain, and Engage – conveniently spelling ASE. I look forward to working with, hearing and learning from every member as we journey together over the coming year. I hope to meet everyone in person in Nashville in September as we celebrate our first 50 years and kick off the next 50!

This text also appears in the July issue of JASE OnlineJASE.com

President's Message for ***August***

THE JOY OF BEING AN ACTIVE MEMBER AND VOLUNTEER FOR ASE

Contributed by ***David H. Wiener, MD, FASE****, Director of Clinical Operations at the Jefferson Heart Institute and Clinical Professor of Medicine at Thomas Jefferson University, Philadelphia, PA.*

"You make a living by what you get. You make a life by what you give."

–Winston Churchill

> Come to our Scientific Sessions and see how readily you can interact with peers and have easy access to ASE's very eminent yet approachable and non-hierarchal leaders..

As I prepare for ASE's fabulous 50th celebration in Nashville next month, I began to reflect on ASE's critical role in my professional and personal growth. I want to share my thoughts with our members in the hope they might inspire you to become a more active part of our Society, and to motivate you to convey the joy of belonging to and volunteering for ASE to colleagues who have yet to discover it.

Professional societies provide many benefits to their members. These include networking, career advancement, educational resources, advocacy, a sense of community and support, and the opportunity to influence the field on a larger scale. ASE certainly ticks all these boxes, yet, of the plethora of organizations which sonographers, physicians, veterinarians, scientists, nurses and other cardiac ultrasound professionals can join, what makes ASE unique, prompting its members to devote so much time and energy to it? For me, it's the joy I derive from the personal and professional relationships I've developed in our "Society with a Soul," and the opportunities I've had to grow my skills in diverse areas.

ASE is just the right size: as the world's largest cardiac imaging society with over 20,000 members in 119 countries, we are big enough to make a difference. Our voice is heard and respected, we have the resources to support advocacy, education, guideline development, and develop novel means

to deliver education. Yet we are not so large as to be overwhelming. Come to our Scientific Sessions and see how readily you can interact with peers and have easy access to ASE's very eminent yet approachable and non-hierarchal leaders. And speaking of non-hierarchical, we are an organization with shared governance between sonographers and physicians. Although large, we are granular, with tracks and interest groups for everyone. ASE is collaborative: we work well and cross-pollinate with other organizations.

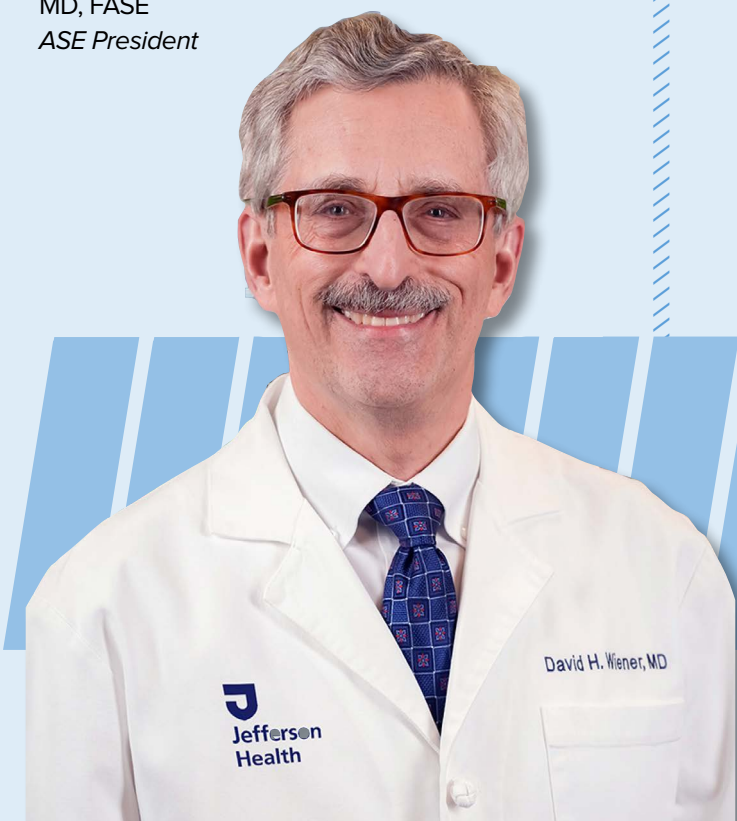
I will share the secret of how ASE contributed to my own professional growth. I learned ASE depends on its members in order to thrive. If you volunteer, for instance on a committee, work hard and do a good job, you will be asked to volunteer again in another area. I started my ASE journey on the advocacy committee, working my way through the finance committee, the "X" journal club task force, and the Board of Directors. I served as an ASE representative to the Board of the Intersocietal Accreditation Commission – Echocardiography, and on our own guidelines and standards committee, among others. Along the way I expanded my professional skill sets, learning about coding, AMA-RUC surveys, and how to lobby in Washington. I found my social media voice, acquired quality improvement and accreditation skills, and became an editor and publisher. I honed my leadership abilities in a graded fashion by learning from the best and made fast friends among echo colleagues the world over. What we do in our daily jobs is "retail:" we are privileged to influence the course of one patient at a time. What we do via ASE is "wholesale:" we can influence the course of cardiac ultrasound in its entirety. ASE provides me with professional balance, camaraderie, and satisfaction, part of the antidote to the epidemic of burnout plaguing our profession.

So, I hope you take me up on this invitation, which is extended to you and to every cardiac ultrasound enthusiast you know. Join ASE, be among the 1,328 volunteers who are active on ASE's committees, task forces, councils, and special interest groups. Represent ASE to nonmembers and advocate for ASE. Come to courses and Scientific Sessions. Introduce yourself to me and any of ASE's eminent and approachable leaders, either next month in Nashville or next year in Denver. Join the fun – and grow as a person and a professional.

“
ASE provides me with professional balance, camaraderie, and satisfaction, part of the antidote to the epidemic of burnout plaguing our profession.

This text also appears in the August issue of JASE OnlineJASE.com

David H. Wiener,
MD, FASE
ASE President



Behind the Probe:

A Glimpse into the Life of a Research Cardiac Sonographer

*Contributed by **Shelby Brown BS, RDCS, RVT, FASE**, Lead Sonographer of Sports Cardiology Research at Sanger Heart & Vascular Institute Charlotte, North Carolina*

MY JOURNEY IN sonography began at fast-paced, high-volume clinical sites, where I gained invaluable exposure to a wide range of cardiac pathologies and patient interactions. These environments demanded efficiency and precision, pushing me to scan with purpose and consistently seek the diagnoses physicians needed. This hands-on experience deepened my curiosity about echocardiography, compelling me to explore the "why" behind each image and diagnosis. That drive for deeper understanding ultimately led me into the field of research, where I strive to contribute to the ongoing advancement of cardiac imaging and patient care.

I was fortunate to be exposed to a variety of research studies offered at my facility, and I began scanning many of the ongoing projects across our care centers.

I was fortunate to be exposed to a variety of research studies offered at my facility, and I began scanning many of the ongoing projects across our care centers. This experience sharpened my attention to detail, especially with regard to complex protocols and strict image quality standards. Over time, I developed a growing interest in sports cardiology, the field where I truly immersed myself. I began by conducting in-depth research specific to this area, which eventually evolved into becoming a dedicated research sonographer.

In my experience, the key difference between a sonographer who performs research studies, and a research sonographer is the breadth of responsibilities. I became actively involved in data collection, data analysis, and gained a solid understanding of the IRB review process and the full lifecycle of a research study. I also strive to be a reliable resource for both leadership and fellow sonographers, ensuring organization, maintaining efficiency,

and supporting compliance with each study's unique guidelines.

A typical work week involves a wide range of responsibilities, with a strong focus on data collection. Much of my work includes retrospectively retrieving and reviewing echocardiograms to ensure they align with the study's objectives, sometimes targeting specific pathologies such as HCM or varying degrees of aortic stenosis or populations such as elite athletes. I also spend time de-identifying patient demographics to maintain confidentiality while keeping detailed records to stay organized.

At different stages of a study, I enter and analyze data independently or in collaboration with statisticians and data analysts. To support team coordination, I manage shared files accessible to all sonographers involved in research, including echo protocols, schedules, and other essential resources. This ensures everyone remains aligned. Finally, I contribute to the completion of each study through collaborative efforts in writing and presenting the findings.

I've taken several practical courses to strengthen my research expertise. Collaborative Institutional Training Initiative (CITI) provided a solid foundation in research ethics and human subject protection, while also deepening my understanding of the IRB review process and investigator responsibilities. I've also completed training in key databases such as REDCap and Microsoft Excel, tools that are essential for effective data collection and analysis in research settings. In addition, I rely heavily on Microsoft Teams as a centralized platform for collaboration. It allows me to share documents, communicate with colleagues in real time, and coordinate study logistics across departments. I believe that the more you educate yourself on each stage of the research process, the more confident and capable you become in managing and executing a successful study.

There are moments when research can feel tedious or never-ending but knowing that each step contributes to advancing the field makes it incredibly rewarding. Reaching the conclusions of a study brings a deep sense of accomplishment. I stay inspired by revisiting the places that shaped me as a young sonographer and reflecting on how far I've come since starting my research journey.

I love sharing my knowledge and experiences with newer sonographers who share the same passion. Just as it's important to understand the "why" behind an image, it's equally important to understand the "why" behind the people you work with, what drives them and what sparks their interest. Becoming an advocate for research and echocardiography has been a powerful motivator, and it fuels my commitment to inspiring the next generation of sonographers.

There are moments when research can feel tedious or never-ending but knowing that each step contributes to advancing the field makes it incredibly rewarding.

SONOGRAPHER SPOTLIGHT

Dawn Park, BS, RCCS, RDCS, RDMS, FASE

Nationwide Children's Hospital
Columbus, Ohio

Q&A

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

I work at Nationwide Children's Hospital in Columbus, Ohio and I am a Cardiac Sonographer Educator.

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

Long story short—my dad told me to go into ultrasound. Back in 1997, I originally wanted to be an athletic trainer. Learning and retention had always been a struggle for me, and I didn't test well. But everything changed during my sophomore year of college when I took anatomy and physiology. For the first time, studying clicked—and I'll never forget earning a 4.0 that semester. It was the moment I realized my hard work could pay off. While I was still figuring out my path, my dad had an ultrasound and happened to know the sonographer. He asked a lot of questions and came home convinced: "You should do this." Job security and good pay were high on his list. It was easier to agree than to argue—so I did. Luckily for both of us, it turned out to be a great decision. Even now, 25 years later, he proudly takes credit for my career.

I spent over half my career at Children's Hospital Colorado which was my first time working in an academic center. After a short time at All Children's Hospital, I found Nationwide Children's in 2024. Throughout my career, I've found inspiration in the people in our field who are both knowledgeable and humble—those who are generous with what they know and never make you feel small for asking a question. I'm also inspired by those who see potential in others, even when they don't see it in themselves, and take the time to encourage and uplift.

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

I attended my first ASE Scientific Sessions in 2017, and I was amazed by the variety of sessions and the sense of community within the organization.

> "Teaching has always been a core part of who I am, and being involved with ASE allows me to contribute in meaningful ways."

With encouragement from friends and colleagues, I applied for and received my FASE credentials in 2019. That recognition opened many doors and gave me opportunities to get more involved through volunteering. I continue to volunteer because I'm passionate about being a voice for sonographers and educators. Teaching has always been a core part of who I am, and being involved with ASE allows me to contribute in meaningful ways. One of the most rewarding experiences has been serving as a mentor through ASE's Mentor Match program, where I can support and guide others entering the field.

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?

Currently, I serve as a Member at Large for the Cardiovascular Sonography Council and am also a member of the ASE ImageGuideEcho Registry Committee. In the past, I've contributed to the FASE, Training & Certification Advisory Committee as well as the Education Committee. Outside of ASE, I am currently the Sonographer at Large for the Board of Directors and the co-chair of the education committee for the Society of Pediatric Echo (SOPE). Each of these committees have helped me see the bigger picture outside of an institution and it has been amazing to be part of groups that can make a change.

I continue to volunteer because I'm passionate about being a voice for sonographers and educators. Teaching has always been a core part of who I am, and being involved with ASE allows me to contribute in meaningful ways. One of the most rewarding experiences has been serving as a mentor through ASE's Mentor Match program, where I can support and guide others entering the field.

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

One of the earliest changes I witnessed—though I'm definitely dating myself here—was the shift from video capture to digital imaging. Gone are the days of labeling tapes and hoping that you were not recording over another echo! Since then, the technological advancements in echocardiography have been remarkable, making it possible to obtain clearer, more detailed images with greater efficiency. Another major shift has been the growing recognition and value placed on the input of sonographers. While I've always felt respected in my role, it's clear that our voices are now being heard in more impactful ways—whether it's in clinical decision-making, education, or professional leadership. I've learned that while change can be challenging, the mindset you bring into it makes all the difference. Embracing change with a positive and proactive attitude has helped me grow both personally and professionally.

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

My vision for the future of sonography includes greater recognition of the sonographer's role as a critical thinking professional—not just a technician. I hope to see expanded opportunities for advanced practice roles, leadership, and formal educator positions within the field. What invigorates me is seeing how the role of the sonographer continues to evolve—especially as we take on more leadership, teaching, and mentorship roles. There's a growing recognition of the importance of lifelong learning, and I'm excited about how we can shape the future by supporting and inspiring the next generation of sonographers. What really excites me is the rapid advancement of technology, improved imaging capabilities, and the potential for real-time decision support tools. These innovations won't replace the expertise of the sonographer, but rather enhance it, allowing us to work smarter and focus more on patient care and education.

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

Find a mentor who can guide and support you-it makes a world of difference. Ask questions, stay curious and always be open to learning. Most importantly, challenge yourself to step outside of your comfort zone. Whether it's volunteering for a project, presenting at a meeting, or joining a committee, those small steps can lead to meaningful connections and opportunities to grow both personally and professionally.

2025 Scientific Sessions Preview:

A Focus on Vascular Disease

Contributed by ***Aaron W. Aday, MD, MSc, RPVI***

Vascular ultrasound can help elevate your POCUS assessment, and this year's Sessions is the ideal setting for attendees to learn about these topics.

WITH ASE'S 2025 SCIENTIFIC SESSIONS fast approaching, I want to highlight the breadth of programming at this year's meeting focused on vascular disease. Identifying and treating various peripheral vascular diseases is a core component of all cardiovascular practices, and we are fortunate to have a dedicated Circulation & Vascular pathway at this year's meeting. Similarly, vascular ultrasound can help elevate your POCUS assessment, and this year's Sessions is the ideal setting for attendees to learn about these topics.

On the first day of the meeting, we have a session on Bedside Ultrasonography for Management of ECMO. This session will cover POCUS, TEE imaging, and vascular ultrasound for optimal ECMO cannulation, weaning, and identification of complications. Bedside echo and vascular ultrasound have become such important tools in the care of critically ill patients, and we're excited to hear from international experts in this space.

Friday is a busy day with two sessions on arterial disease. First up is Carotid Rodeo, which will cover the basics of carotid ultrasound, semiquantitative analysis of carotid plaque burden, and a discussion of how such imaging can help refine cardiovascular risk assessment.

Faculty presenters in this session include vascular ultrasound experts, authors of ASE's 2020 carotid plaque assessment guidelines, and leaders in cardiovascular epidemiology and prevention. This should be a spirited discussion.

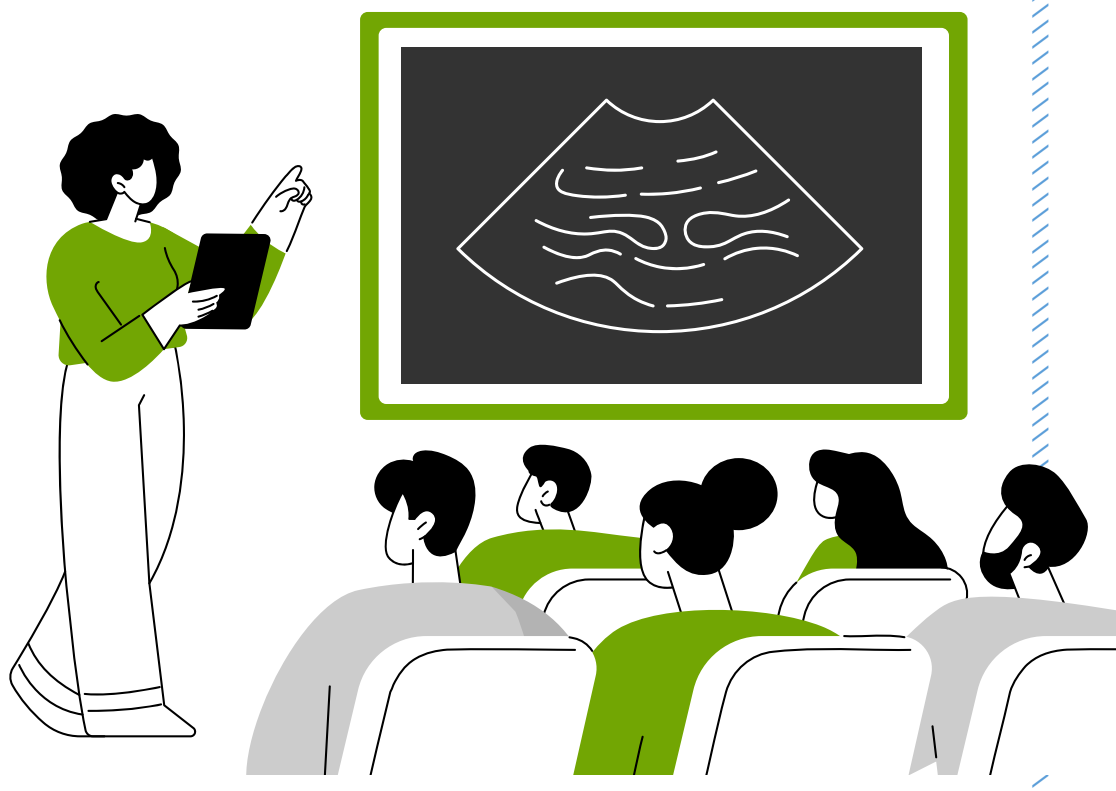
Next up on Friday is a case-based, interactive session on complex aortic disease with a panel of experts in imaging, genetics, medical management, and surgical repair. This session is particularly timely given the new multi-society aortic guidelines published in 2023, and this is a great opportunity for the audience to learn how these guidelines are already impacting patient care.

The final day of the meeting begins with another session on aortic disease with an international panel of experts. This session will focus on acute aortic syndromes, thresholds for surgical repair, and cutting edge imaging data on risk prediction for patients with aortic disease. Our aortic sessions are always well-attended, and we're honored to have experts from around the world willing to share their unique experiences.

The final session in the Circulation & Vascular track brings us back to bedside imaging with a session on using vascular ultrasound for volume assessment. The goal of this session is to provide clinicians with tools to move beyond a POCUS assessment of the inferior vena cava when attempting to determine volume status. It will incorporate an overview of spectral Doppler waveforms, hemodynamic changes that occur particularly with abdominal pathology, and a discussion of how to incorporate these findings into the Venous Excess Ultrasound (VExUS) rubric.

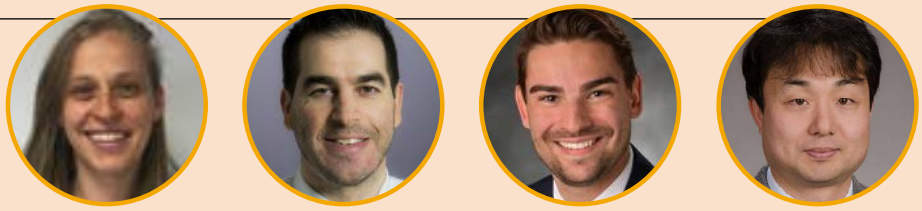
Given the breadth of topics in the Circulation & Vascular pathway, there are sessions covering the full spectrum from prevention to critical care, and there are sure to be engaging panel discussions relevant to all types of clinical practices as well as research. We hope you enjoy these sessions, and please let us know what topics would interest you in the future. We look forward to seeing you in Nashville this September.

There are sessions covering the full spectrum from prevention to critical care, and there are sure to be engaging panel discussions relevant to all types of clinical practices as well as research.



Is TEE the New Kid on the Block in Resuscitation?

Contributed by ***Chelsea Willams, MD, MPH, DTM&H, Department of Emergency Medicine, University of Washington, Seattle, WA; Ross Kessler, MD, Department of Emergency Medicine, University of Washington, Seattle, WA; Joshua Ferreri, MD, Department of Emergency Medicine, Anesthesiology, and Pain Medicine, Department of Critical Care Medicine, University of Washington, Seattle, WA;*** *and* ***Younghoon Kwon, MD, Division of Cardiology, University of Washington, Seattle, WA***



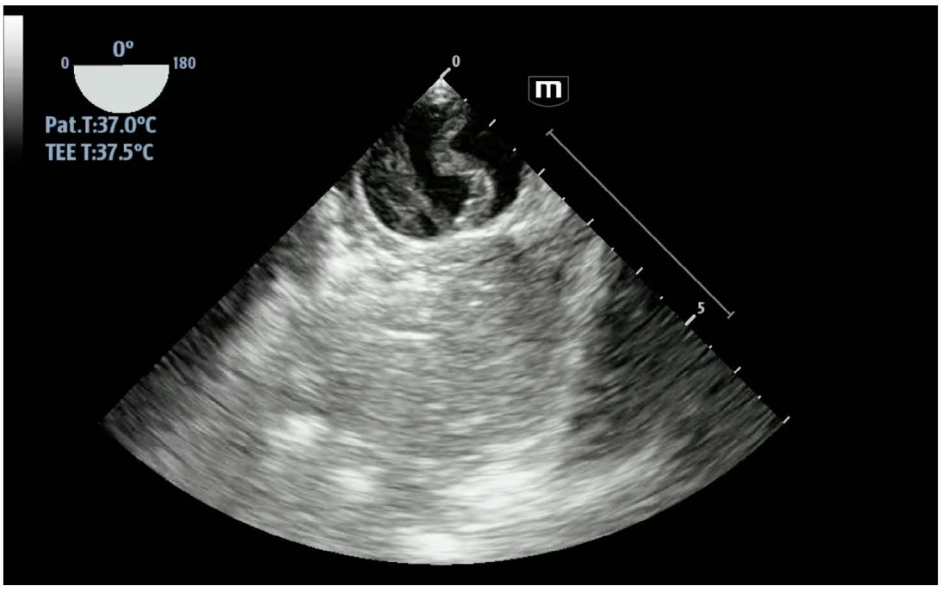
TEE has evolved into a tool that offers real-time, high-resolution images and 3D evaluation of the heart and its various structures.

TRANSESOPHAGEAL ECHOCARDIOGRAPHY (TEE) was first utilized nearly 50 years ago by anesthesiologists to assist with intraoperative guidance and monitoring during cardiac surgery.[1] Since that time transesophageal echocardiography has advanced substantially, both in image quality and its clinical application. TEE has evolved into a tool that offers real-time, high-resolution images and 3D evaluation of the heart and its various structures. Its application has spread outside of the operating room, broadening the potential for its use in a variety of clinical settings and by a wider range of operators. Specifically, this has led to the application of TEE at the bedside, ushering in a new wave of advanced ultrasound guided resuscitation in the emergency department and critical care settings - termed resuscitative TEE.

As point-of-care ultrasound has become more integrated into everyday emergency department and critical care practice, bedside transthoracic echocardiography (TTE) is utilized frequently during cardiopulmonary resuscitation (CPR) and after return of spontaneous circulation (ROSC). TTE helps to determine cardiac activity during pulse checks and provides a basic assessment of cardiac function. However, TTE views are often limited by external patient factors such as body habitus, defibrillation pads, mechanical compression devices, and bowel gas. In addition

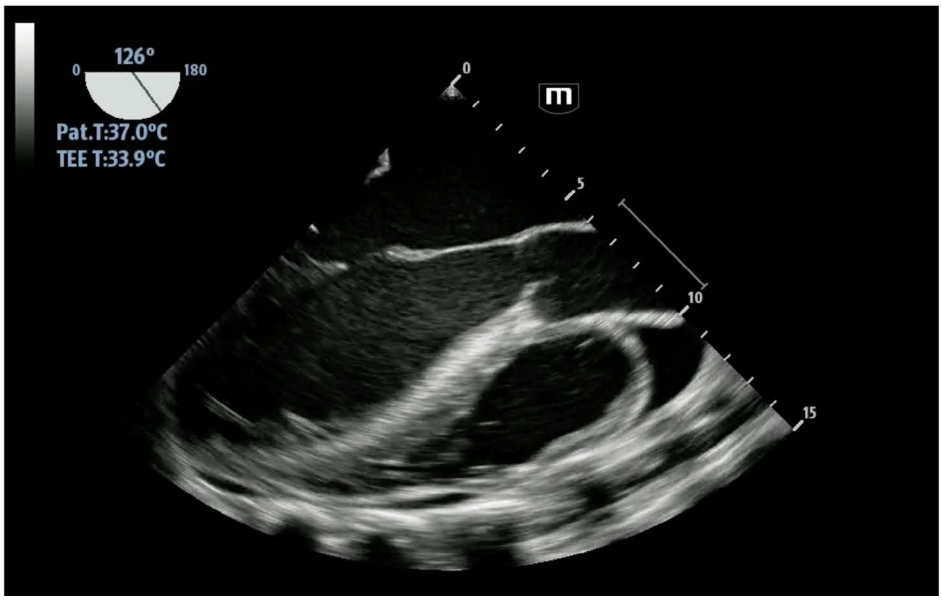
to these limitations, the use of TTE during active resuscitation has shown to increase pauses over the recommended 10 seconds during resuscitation, threatening quality and timely resuscitation.[2]

Contrary to belief clinicians unfamiliar with the TEE may have, TEE is less operator dependent than TTE in that there is less variability in image quality. By decreasing the distance between the transducer and various structures, the absence of bone/lung/tissue interference, and the ability to perform the procedure without the interruption of high-quality CPR, resuscitative TEE overcomes many of these barriers.[3] The esophageal probe can remain in place throughout CPR, allowing for the continual assessment of the quality and location of chest compressions, guide resuscitation, and assess cardiac function during pulse checks. With TEE's better image quality, it also better identifies reversible causes of arrest such as pulmonary artery dilation and right heart strain to suggest acute pulmonary embolism or focal wall motion abnormalities to suggest acute coronary syndrome.



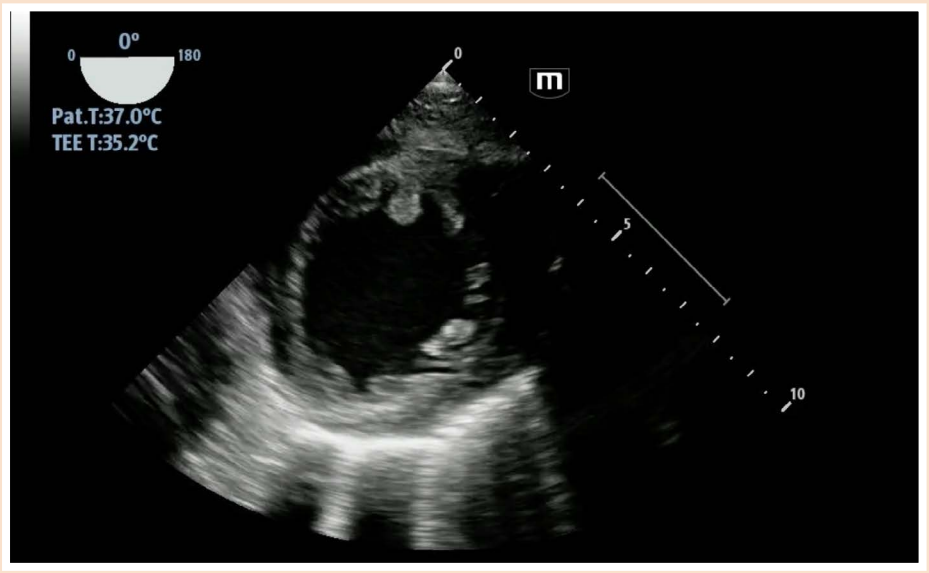
◀ IMAGE 1

TEE performed during out of hospital cardiac arrest. Midesophageal short axis view of the descending thoracic aorta was obtained which revealed evidence of aortic dissection. Resuscitative efforts were terminated following TEE findings.



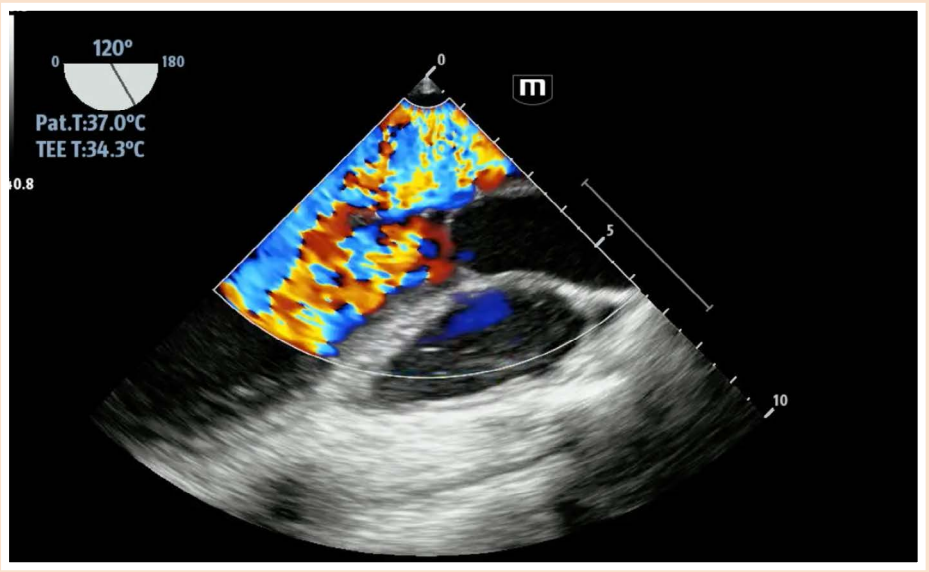
◀ IMAGE 2

Midesophageal long axis view



◀ IMAGE 3

Transgastric short axis view



◀ IMAGE 4

Midesophageal long axis view with color flow doppler across the mitral valve, with evidence of significant mitral valve regurgitation.

◀ IMAGE 5

Midesophageal mitral commissural view that shows flailing of the mitral valve leaflet / ruptured chordae into the left atrium.

Additionally, it can serve as guidance for various procedures, including bedside cannulation for extracorporeal membrane oxygenation (ECMO).

Comprehensive TEE is a complex and valuable tool in the hands of experienced operators. However, comprehensive TEE assessments require high level training on 20 standard views. Thus, the American College of Emergency Physicians (ACEP) developed a minimal standard of care focusing on three standard views for Resuscitative TEE: midesophageal 4-chamber view (ME4C), midesophageal long-axis view (MELAX), and transgastric short-axis view (TGSAX).[4] Additional views, such as the midesophageal bicaval (ME Bicaval) view, are also often used to guide fluid responsiveness as well as to visualize ECMO cannulation. Numerous studies have shown the feasibility and safety of using these TEE protocols in the setting of cardiac arrest and acute resuscitation in the emergency room and ICU setting.[5,6]

Each of these views address specific questions about cardiac function during arrest or undifferentiated shock. For example, the MELAX view is used to adjust the area of maximal compression (AMC) to target force over the left ventricle and avoid obstruction of the left ventricular outflow tract or aortic root.[7] Small studies have shown a correlation between changing the AMC with hand position or external compression devices to changes in stroke volume.[8] The views obtained with TEE are also helpful in the identification of fine ventricular fibrillation, PEA, as well as the prompt identification of pseudo-PEA arrest. The TGSAX view can be particularly helpful in the evaluation of overall left ventricular systolic function and for the presence of regional wall motion abnormalities. A multicenter registry for resuscitation-focused TEE is only beginning to find larger scale impacts on clinical care. In one study, TEE interpretation changed clinical decision making in 71% of in hospital cardiac arrests and 62% of cases of out of hospital cardiac arrests. These changes included interventions such as coronary angiography, resuscitative efforts with fluids versus vasopressors, and the initiation of ECMO.[9]

The future of TEE in resuscitation remains promising yet uncertain. Despite its many advantages, it is important to acknowledge the various limitations of the use of TEE. First, insertion of the probe is not without risk and can cause damage to the esophagus, including perforation. Various absolute and relative contraindications exist, including abnormal esophageal anatomy (i.e, stricture, mass, perforation), active upper GI bleed, esophageal varices, or coagulopathies.[3] Further, barriers exist to both initiating and maintaining programs. The TEE probes are fragile and expensive. They require a substantial upfront investment both monetarily and system-wide to address appropriate high-level disinfection and handling of the equipment. A successful Resuscitative TEE program requires the availability of expert trainers and the buy-in of a cohort of emergency medicine physicians, cardiologists, and critical care physicians who will champion the program. In a busy emergency department, it has the risk of diverting resources and physicians away from other clinical care.

Resuscitative TEE remains in the age of innovation, and we are excited to see its continued evolution.

In our academic institution we have found TEE to be a useful tool to expedite management, engender meaningful cross-specialty teamwork, and engage new learners in ultrasound and emergency medicine. Through the application of bedside, resuscitative TEE, we have differentiated pseudo-PEA from true PEA, relocated chest compressions for optimal CPR over the left ventricle, and stopped prolonged resuscitations after finding terminal diagnoses, including a massive aortic dissection and unmanageable mitral insufficiency. We have guided ECMO cannulation at bedside and expedited angiography using images saved from TEE demonstrating regional wall motion abnormalities. Resuscitative TEE remains in the age of innovation, and we are excited to see its continued evolution.

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Structural and Valvular Spotlight:

A Preview of Structural Heart Disease Sessions at ASE's 50th Anniversary Meeting

*Contributed by **Enrique Garcia-Sayan, MD, FASE**, Texas Heart Institute at Baylor College of Medicine, Houston, TX and **Amy Dillenbeck MS, ACS, RDCS, FASE,** Cleveland Clinic School of Health Professions, Cleveland, OH*

This milestone meeting will bring together global experts to explore the full spectrum of cardiovascular imaging, with a standout program for those involved in structural and valvular heart disease.

THE AMERICAN SOCIETY of Echocardiography will celebrate its 50th anniversary at the 2025 Scientific Sessions, taking place September 5 through 7 in downtown Nashville. This milestone meeting will bring together global experts to explore the full spectrum of cardiovascular imaging, with a standout program for those involved in structural and valvular heart disease. Whether you are an interventional imager or a general echocardiographer looking to strengthen your skills in valvular and structural heart disease, the Structural and Valvular Heart Disease track offers a rich mix of clinical insights, advanced imaging strategies, and practical tools to apply in daily practice.

The program features joint sessions with leading international societies, guideline-focused content, and case-based discussions that reflect the real-world decisions faced by heart teams in 2025. Sessions are tailored for all levels of experience and practice, from sonographers and early-career physicians to experienced imagers. Below is a preview of the most anticipated sessions from this dynamic and case-based track.

Friday, September 5

The program opens with "**Rapid-Fire Rheumatic Review: Imaging Innovations for Rheumatic Heart Disease**," a joint

session with the ASEAN and Philippine Societies of Echocardiography. This session highlights how advanced echocardiographic tools, including speckle-tracking and 3D imaging, are transforming the assessment of rheumatic heart disease. Faculty will explore strategies for early detection, integration into routine workflows, and imaging approaches to complex scenarios such as mitral stenosis during pregnancy.

In "**Navigating the Mitral Maze**," presented with the Korean Society of Echocardiography, faculty will take a detailed look at imaging for mitral stenosis. Attendees will gain insights into how to interpret discordant measurements between valve area and gradients using 2D, Doppler, 3D, and stress echocardiography. The session will also address the distinct characteristics and imaging requirements of rheumatic versus degenerative mitral disease.

The day closes with "**Tales from the Other Side of the Drapes**," a collaborative session with the Society of Cardiovascular Anesthesiologists. Through real-world intraoperative cases, a multidisciplinary heart team will demonstrate the central role of imaging in surgical planning, troubleshooting, and team-based decision-making. This session underscores the importance of communication and collaboration in the operating room.

Saturday, September 6

Saturday delivers a full schedule of high-impact sessions covering aortic, mitral, and tricuspid valve disease with an emphasis on imaging-based guidance for structural interventions.

In "**State-of-the-Art Imaging and Management of Aortic Regurgitation**," faculty will explore complex clinical scenarios to highlight best practices in quantifying and managing aortic regurgitation using echocardiography and multimodality imaging. The session will also address lifetime management strategies, challenging surgical decisions, and the expanding role of advanced imaging in planning and guiding emerging trans-catheterinterventions.

"**State-of-the-Art Transcatheter Mitral and Tricuspid Valve Interventions: Expect the Unexpected**," a joint ASE and EACVI session, will feature challenging cases in transcatheter valve therapy. Presenters will demonstrate how 3D transesophageal echocardiography supports device selection, anatomical assessment, and procedural guidance for mitral and tricuspid repair or replacement.

"**How to Assess and Perform Transcatheter Tricuspid Interventions: Tips and Tricks from the Experts**" presents a step-by-step approach to imaging-guided tricuspid repair and replacement.

The Structural and Valvular Heart Disease track at ASE 2025 is designed to meet the needs of a growing and evolving community.

Faculty will review essential techniques for quantifying tricuspid regurgitation, selecting appropriate transcatheter therapies, and providing real-time procedural guidance. The session will also address common technical challenges and offer expert tips for optimizing outcomes.

In "**Episodes of Care: Calcified Mitral Valve Disease**," a joint session with the Cardiovascular Research Foundation, faculty will walk through the entire care continuum for patients with mitral annular calcification. The session will emphasize how multimodality imaging informs diagnosis, planning, and procedural outcomes across surgical and transcatheter approaches.

Sunday, September 7

Sunday's sessions reflect the forward momentum of the field and its embrace of emerging tools and evolving techniques.

"**Imaging for Left Atrial Appendage Device Occlusion**" will provide a comprehensive overview of how echocardiography (TEE and ICE) and cardiac CT are used for patient selection, procedural planning and guidance, and post-implant surveillance in LAAO. Faculty will highlight how each imaging modality contributes to safety and success at every stage of the intervention.

"**Critical Thinking in the Diagnosis of Valvular Heart Disease**" will explore complex and nuanced scenarios such as low-flow, low-gradient stenosis and mixed valve disease. Faculty will review diagnostic strategies and algorithms to support clinical decision-making and will examine how emerging technologies, including artificial intelligence and machine learning, may enhance the diagnosis and management of valvular heart disease.

"**ASE Guideline: Performance of Mitral Valve Edge-to-Edge Transcatheter Repair**" will provide an in-depth overview of ASE's forthcoming guideline on Mitral TEER. Led by members of the writing committee, this session will present evidence-based recommendations for patient selection, imaging protocols, and procedural guidance in both routine and complex cases. Practical case examples and expert workflows will be used to demonstrate how these guidelines can be applied in daily practice.

The day concludes with "**Interventional Echo TED Talks: Where We Are in 2025, and Tomorrow's Vision**," a fast-paced session featuring short, high-impact presentations on key challenges and emerging opportunities in interventional echocardiography. Topics will include the evolution of imaging guidance for TEER, the expanding role of ICE, and a series of hot topics widely discussed across the field, such as radiation safety, training and credentialing, workflow integration, and reimbursement.

Additional Highlights

In addition to the core sessions, attendees are encouraged to attend the "abstract presentations" on valve disease and structural heart disease taking place on Saturday and Sunday. These sessions offer insight into the latest research and allow for direct interaction with investigators.

The "**Structural Imaging Bootcamp**," held in the Learning Lab on Saturday and Sunday, will offer a highly hands-on experience focused on a broad range of interventional echocardiography topics. Participants will receive direct instruction in image optimization, procedural planning, and real-time guidance through case-based teaching and interactive demonstrations led by expert faculty.

Attendees can also participate in "**DIY Acquisition Workshops**" focusing on image acquisition for aortic and mitral regurgitation. Participants will gain practical experience and leave with clear strategies for improving image quality in their labs.

Join Us in Nashville

The Structural and Valvular Heart Disease track at ASE 2025 is designed to meet the needs of a growing and evolving community. With expert-led sessions, hands-on learning, guideline-driven content, and a strong focus on clinical relevance, this program offers a valuable opportunity to refine your skills, connect with colleagues, and stay ahead of the latest developments in the field. Join us in Nashville to celebrate ASE's 50th anniversary and take part in a meeting that will inform, inspire, and advance the practice of echocardiography while honoring five decades of innovation and collaboration.

If you cannot attend, stay engaged by joining the *ASE Interventional Echo Council*.

Fifty Years of Progress in Pediatric and Congenital Echocardiography:

From Those Who Started It All

*Contributed by **Daniel Forsha, MD, FASE**, Children's Mercy Kansas City, Kansas City, MO; **Elena Kwon, MD, FASE**, Children's Hospital at Montefiore, Bronx, NY; **Kenan Stern, MD, FASE**, Mount Sinai Hospital, New York, NY; and **Rebecca Klug, BA, BS, ACS, RDCS, RT, FASE**, Mayo Clinic, Rochester, MN*

Truly massive progress has been made over the years, and it is worth our while to take the time to recognize all the accomplishments of the pioneers of our field.

IN CELEBRATION OF the 50th anniversary of the American Society of Echocardiography, we have gathered some luminaries in the field to regale us with tales of the early days of pediatric and congenital echocardiography. Truly massive progress has been made over the years, and it is worth our while to take the time to recognize all the accomplishments of the pioneers of our field. We stand on the shoulders of giants. To the next 50 years, and beyond!

FEATURING:

Stephen Sanders, MD
Boston Children's Hospital, Boston, MA

Roberta Williams, MD
Children's Hospital Los Angeles, Los Angeles, CA

Joseph Kisslo, MD, FASE
Duke University Medical Center, Durham, NC

Navin Nanda, MD, FASE
University of Alabama, Birmingham, AL

Norman Silverman, MD, FASE
Stanford University Medical Center, Palo Alto, CA

DR. STEPHEN SANDERS is the director of the cardiac registry and a senior cardiologist at Boston Children's Hospital. He has been at the forefront of the development of the field of congenital cardiac echocardiography.

Q: What were you doing in 1975 and what was the state of pediatric and congenital echocardiography at the time?

A: In 1975, I was a resident at the University of Oregon. A friend and I were interested in cardiology so we went to the local AHA chapter meeting. Rich Popp was giving a talk on this new thing – 2D echocardiography. I was familiar with M-mode echo because I had worked with Bob Solinger as a student at the University of Louisville. Rich showed some moving 2D images – I think it was a pericardial effusion – and I was hooked. Eventually I found Roberta Williams at Boston Children's Hospital, who was my mentor. That was in 1978 when we got our first 2D machine – a Picker with a single crystal transducer that rotated back-and-forth. We used M-mode a lot. 2D was pretty crude – still analog images that sometimes were a little like a Rorschach test. Fred Bierman and I were fellows. We spent a lot of time in the Cardiac Registry with Richard and Stella Van Praagh trying to figure out what structures we were seeing with echo. It was quite fun, a time of very rapid learning.

Q: What have been the most significant advancements in pediatric/congenital/fetal echo over the past 50 years? What has your involvement been with those advances?

A: One of the big advances was in the 80s when we switched from analog to digital imaging. This allowed sophisticated image processing. Advances in transducer technology using multiple frequencies have improved image quality. Color Doppler was a major advance. It basically overlaid the physiology on the anatomy. I think Fred and I demonstrated and popularized subxiphoid imaging, which is essential in infants and children. We also showed that coronary imaging was possible in various congenital defects and also showed the value of color Doppler in coronary imaging. Because of our relationship with the Van Praaghs we were able to understand the imaging of complex defects.

Q: What do you foresee the next 50 years bringing?

A: I agree with Yogi Bera – It's hard to predict, especially the future. I guess we will see merging of various modalities – echo with CT or MRI to exploit the temporal resolution of echo and the spatial resolution and unimpeded view of MRI/CT. Tissue characterization with MRI will improve, allowing fiber analysis, fibrosis assessment, etc. May not be like a biopsy but close. Intravascular imaging either with echo or optical coherence tomography will improve assessment of vessel walls, valves, maybe myocardium. Probably there will be a new modality not known today.

DR. ROBERTA WILLIAMS, a pioneer in our field, was the first echo lab and cardiac ICU director at

Boston Children's Hospital. She has held leadership positions as division chief and department chair.

Q: What were you doing in 1975 and what was the state of pediatric and congenital echocardiography at the time?

A: I had purchased a Hoffrel M-mode machine in 1973 for $7,500. The scope had poor persistence, and the sweep was manually timed and recorded with a WWll camera. Nevertheless, we could track the development of subaortic stenosis in HOCM and assess LV function in postoperative patients. By 1974, we could distinguish between Types A and C common A-V valves. Sometime around 1975, I finally got a strip chart recorder, which made life a lot easier. At Boston Children's Hospital, echo and early infant surgical repair advanced in collaboration. Echo added to cath and angiography but was indispensable for post-operative care. We began to repair ASDs without cath. We early pediatric imagers began trekking the globe, but mostly talked to ourselves, because the anatomic image was in our heads and others had to take our assessment on faith.

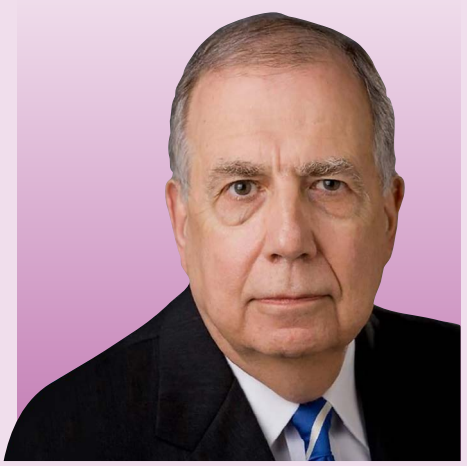
My recollection of the beginning of ASE is that we were gathered with Feigenbaum in Indiana when Feigenbaum looked around the room and asked if there was any important person missing. We said, "No, we are all here". Then he introduced the idea of ASE. Now, that might be a false memory, but I can almost remember what I was wearing.

Q: What have been the most significant advancements in pediatric/congenital/fetal echo over the past 50 years?

A: I think it was incremental advances with a million steps. First, we had to get over our identity with our varying transducer profiles, which dictated whether we used the parasternal, apical or SSN approach. Then we could focus on the complete image and doppler findings, utilizing all views. At that point, echo was able to move into the role of definitive diagnosis and cath could reinvent itself as an intervention technique.

Q: What do you foresee the next 50 years bringing?

A: I see the future value of echo as a screening tool, and as the most efficient methodology for following function, etc longitudinally. It will certainly remain the primary diagnostic tool in low resource communities. It might also pair with new treatment strategies to deliver medications or energize imbedded reagents.



DR. JOSEPH KISSLO has been a true innovator in the field of adult and PCHD echocardiography playing a large role in the development of the phased array transducer and many other echo innovations. He was the 4th president of the ASE and has contributed greatly to the society over the last 50 years.

Q: What were you doing around the time when the ASE was founded in 1975 and what was the state of pediatric and congenital echocardiography at the time?

A: I did my first echo in 1965 when I was a student. Then, I went to the military, and when I got back, I was at Yale for training between 1970 and 1972. At that time, it was only M-mode. I was doing complex congenital echos with an M-mode only device... you have no idea how hard that was. That's how I got started. I mean, you can pick out a transposition, but it was really, really hard. And so, absolutely, the biggest echo advance in congenital heart disease, was 2D, because 2D made sense. We did have a 2D device early on in my time as faculty at Duke. It was just an in-line, maybe 21 lines just straight ahead. You couldn't see very much, but least you could see things in two dimensions, so you could find great vessels,

ventricles, and you could figure out most of it. When ASE started in 1975, I was on the faculty at Duke and we were doing 2D scanning with this machine. I was trying to convince Olaf Von Ramm (bioengineer colleague and innovator) to write a paper about it to let the world know about this innovation. But it was phased arrays that finally made it so we could provide more complete congenital diagnoses, but these transducers really didn't arrive until the 80s when they became commercially available.

I remember that the first textbook that made congenital heart disease make sense was from David Sahn and Bob Anderson. This helped move pediatric cardiology forward significantly. Pediatric cardiology came along a lot later than adult cardiology, but that was basically difficulties with echo instrumentation. It was a little bit after this that Maddie Spock (Director of Cardiology at Duke) came to me and said, "you know, I want you to do congenital... all the congenital echoes." At that time, we had access to a relatively new machine with color flow, another crucial advancement in echo. And so, I started doing the congenital scans including a lot of epicardial scans in the OR back in the early days. That was great fun!

I also remember going to the first ASE meeting in Indianapolis that Harvey (Feigenbaum) put together. I remember one of the focuses was on CPT codes and how to create CPT codes for echocardiography that would reimburse the cardiologists for the work they were doing like the radiologists had done.

It's sad that David Sahn isn't still alive because he wrote some very famous PCHD echo papers at the time. Yeah, he had this wonderful paper called Meat. He used different cuts of steak and evaluated whether a sirloin was better than a filet mignon, better than a rib eye as an imaging standoff (laughter). It was an abstract... I don't know whether it ever got into manuscript. Roberta Williams was also wonderful. Always used the liver as a standoff, which was remarkable. With the technology available then, babies were just not suited for ultrasound unless you made specific modifications, like working with a standoff.

Q: What do you foresee the next 50 years bringing into the field of pediatric and congenital echocardiography?

A: Well, I think day's going to come when there will be non-Doppler flow technology integrated into daily workflow. I mean, we won't be so oriented to scan angles. And, while we think we know pretty well how the heart works, the future is going to lead to whole new revolutions in our understanding of this organ and how it really works. But you know, ultrasound itself... you try to think every year, what will be the next big advance made in ultrasound? I think a big advancement will be the ability to overcome poor imaging windows. In that regard, babies are comparatively easy. But kids as they get older, and adults... geez. Especially after they've had surgery, it's a disaster from an imaging quality standpoint. We'll figure that one out eventually.

DR. NAVIN NANDA has been involved in many of the biggest advances in the field of echocardiography over the last 50 years.

Q: What were you doing around the time when the ASE was founded in 1975 and what was the state of pediatric and congenital echocardiography at the time?

A: 1970-1975: The identification/discovery of the pulmonary valve by our group in Rochester, New York (1972), heralded a new era with tremendous development in the assessment of PCHD

by echocardiography. The first outcome was the diagnosis by M-mode echocardiography of dextro-transposition of the great vessels (DTGA) in the newborn, also by our group (1973) which saved the lives of cyanotic newborns by emergently taking them to the catheterization lab for enlarging their PFOs. I remember getting called many times, in the middle of the night, to perform echo studies in newborns to confirm or rule out this entity. This was followed by studies from us in identifying subpulmonic obstruction in DTGA and identification of intra-atrial baffle dysfunction following the Mustard procedure (1974-75). Another watershed was the identification of congenital bicuspid aortic valve in 1974 by our group also. Discovery of the pulmonary valve by echo also resulted in the first attempt by our group to diagnose pulmonary hypertension (1974).

Post 1975: The first introduction of color Doppler echocardiography in the United States in 1984 in our Echo Laboratory at the University of Alabama in Birmingham represented another revolution in echocardiography that resulted in widespread utility of this technique in the assessment of PCHD especially in the assessment valve regurgitation and shunt lesions in CHD. In 1982, Deb Maulik and I, for the first time, used pulse Doppler to evaluate normal and abnormal fetal hemodynamics and fetal cardiac disease. Usefulness of color Doppler flow imaging in the fetal heart was reported for the first time by us in 1986. In 2003, I used, for the first time, real-time 3D echocardiography in the fetus and diagnosed complete atrio-ventricular septal defect. The Society of Pediatric Echocardiography was formed in the same year as ASE in 1975 and I was a member of the Founding Board of Directors, chaired the Membership Committee and was Treasurer.

Q: What do you foresee the next 50 years bringing into the field of pediatric and congenital echocardiography?

A. I see the future as further advances and ease in performing and interpreting 3D/4D echocardiography, use of artificial intelligence and further developments in percutaneous interventional procedures setting another new era in pediatric cardiology and fetal heart disease.

DR. NORMAN SILVERMAN is renowned for his contributions to fetal and pediatric echocardiography and has significantly advanced and shaped modern pediatric cardiac imaging and mentored a generation of cardiologists worldwide.

Q: What were you doing in 1975 and what was the state of pediatric and congenital echocardiography at the time?

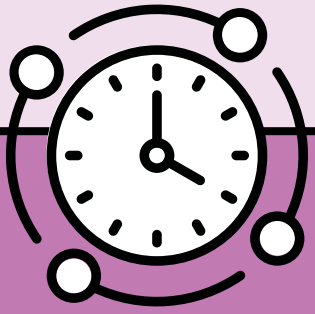
In 1975 I was an Assistant professor, just starting out in echocardiography. I looked at the changes that occurred in transposition after atrial baffle procedures. With Dr. Nelson Schiller, I described the Apical 4-chamber view for defining congenital heart disease. You can find these articles in Circulation.

Q: What have been the most significant advancements in pediatric/congenital/fetal echo over the past 50 years?

A. All of them have been significant. Only 2 have failed: Integrated backscatter and contrast echo calculation of blood flow.

Q: What do you foresee the next 50 years bringing?

A. I have not got a clue! AI of course, new imaging techniques using semiconductors rather than crystals, and computer manipulation of ultrasound data. All images will be 3D or 4D in nature. Tissue characterization will become possible.



TIMELINE HIIGHLIGHTS

Adapted from - Fraser AG, Monaghan MJ, van der Steen AFW, Sutherland GR. A concise history of echocardiography: timeline, pioneers, and landmark publications. Eur Heart J Cardiovasc Imaging. 2022 Aug 22;23(9):1130-1143. doi: 10.1093/ehjci/jeac111. PMID: 35762885; PMCID: PMC9365309.

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1967 and 1971

Reports of echocardiography in congenital heart defects published by Ultan et al. in *The American Journal of Cardiology* and Lundstrom et al. in *Acta Paediatr Scand*

1972

Description of fetal cardiac anatomy by Winsberg in *Investigative Radiology*

1974

Description of systematic approach to 2D imaging, including congenital heart defects, by Bom and Sahn in *Ultrasound in Med. & Biol.*

1976

First description of clinical imaging using a phased array transducer by Kisslo and Von Ramm in *Circulation*

1978

Report of epicardial echocardiography for congenital heart disease by Spotnitz et al. in *NY State J Med*

1978

Description of apical imaging for congenital heart disease by Silverman and Schiller in *Circulation*.

Mid 1980s

Introduction of color flow mapping

1980s-1990s

Development of higher frequency and smaller footprint transducers

1989

Description of transesophageal echocardiography for congenital heart disease by Cyran et al, *Am J Cardiol*

Early 2000s

Development of miniature transesophageal echocardiography probe for infants

2020s

Development of pediatric 3D transesophageal echocardiography probes

TIPS & TRICKS

"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 imaging arch sidedness.

*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*

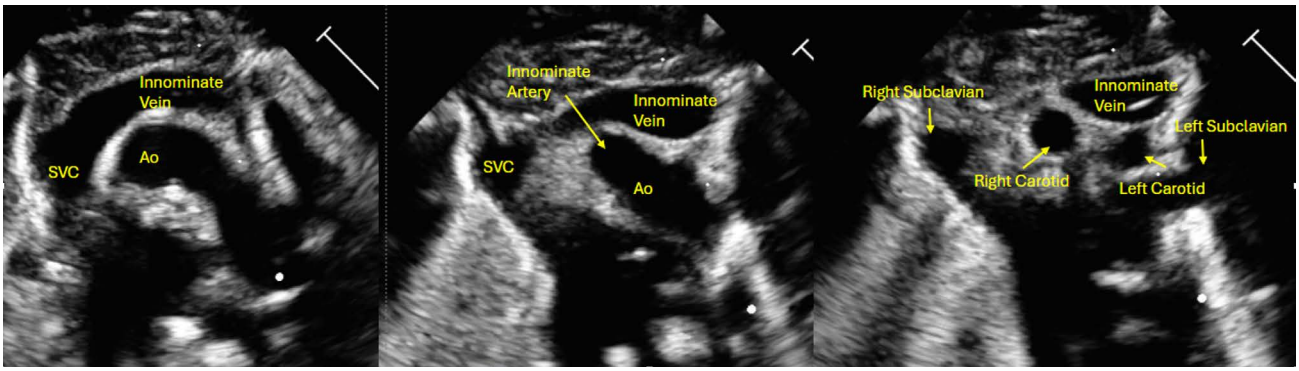
AORTIC ARCH SIDEDNESS

Technical tips

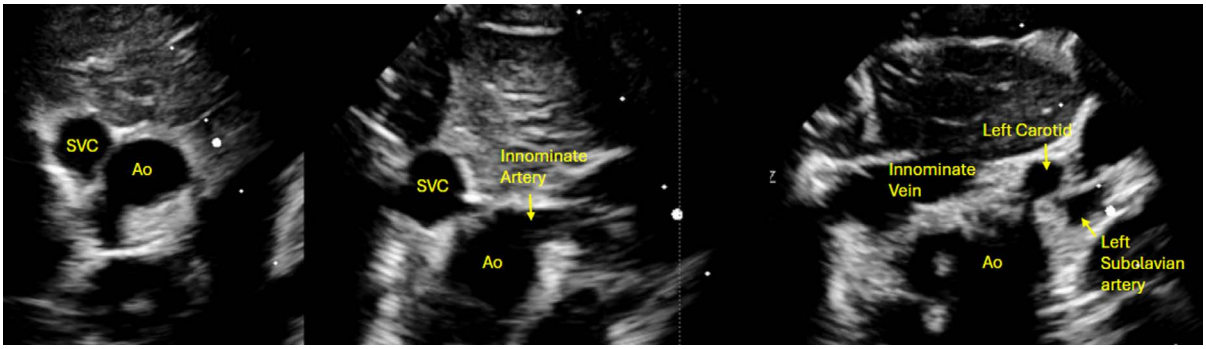
1. Extend the patient's neck well by having roll or pillow underneath their shoulders.
2. Use Harmonics to give definition to the vessels.
3. Use a low Color frequency (flow-opt) and lower the scale to help fill the head and neck vessels.

Transducer notch at 3 o'clock

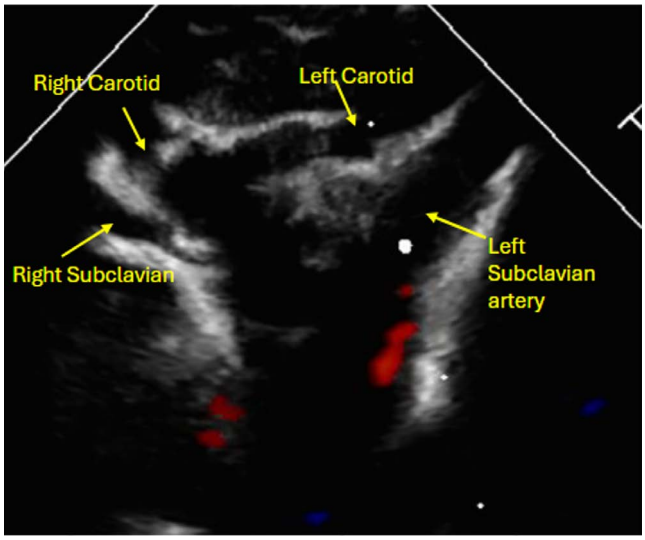
1. Starting from the cross section view of the aorta (Ao) sweep up (bring the transducer tail down) to see which side the first brachiocephalic vessels take off.



Left aortic arch with normal branching pattern: The innominate artery comes off heading to the right and then the carotid and subclavian take off as circles to the left.

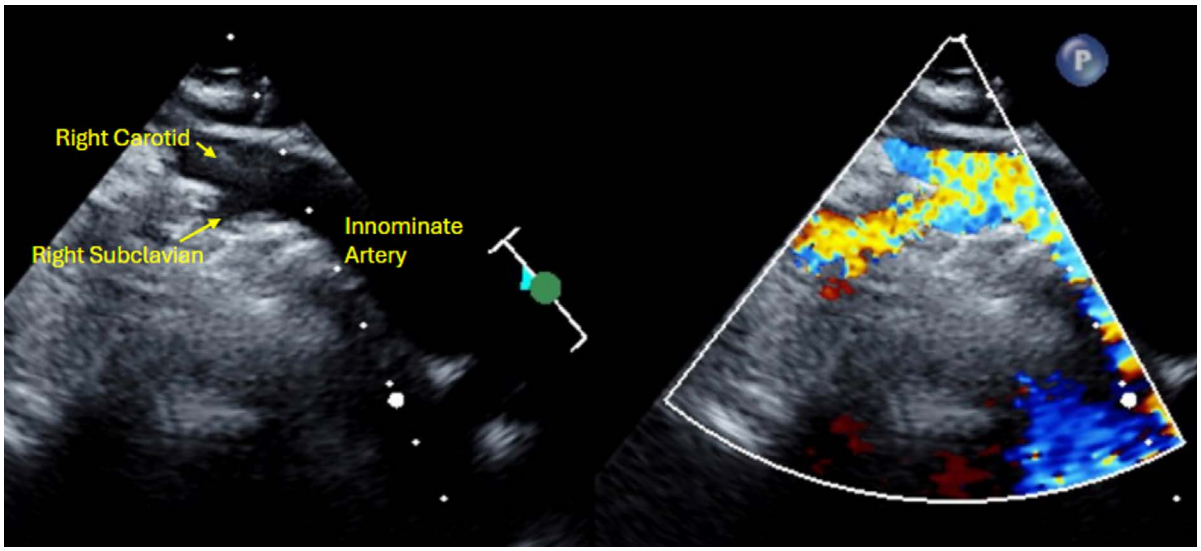


Right aortic arch with mirror image branching pattern: The innominate artery heads to the left as the first vessels from the aorta.

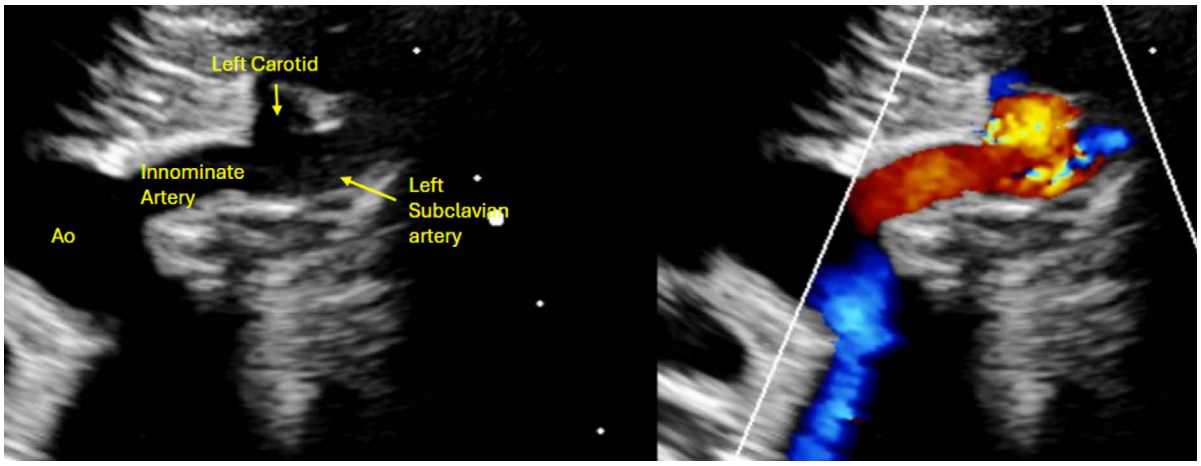


Right aortic arch with aberrant left subclavian artery: The left carotid is the first vessel seen coming from the aorta, followed by the right carotid and subclavian artery and the left subclavian artery is seen as the last vessel.

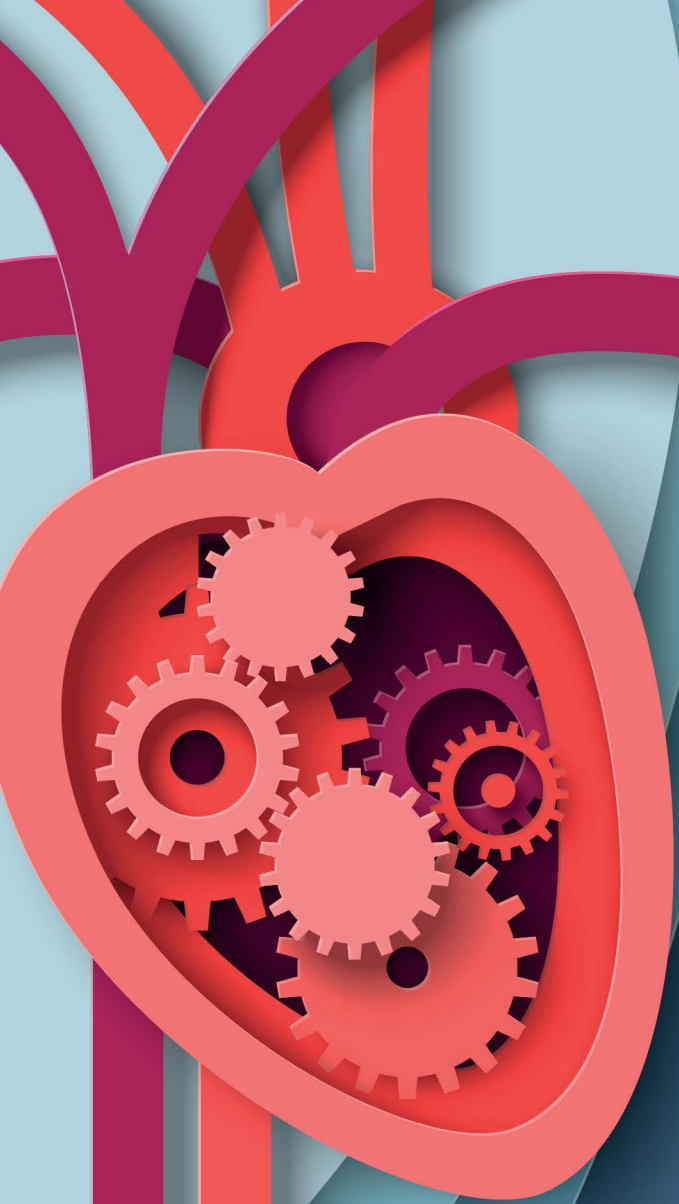
You can also elongate the innominate artery and show the bifurcation direction ("bunny ears") by turning clockwise to 4 o'clock and angling up.



Left aortic arch with normal branching pattern “bunny ears” to the right



Right aortic arch with mirror image branching pattern “bunny ears” to the left.



DIASTOLIC FUNCTION AND HEART FAILURE DIAGNOSIS GUIDELINES 2025 UPDATE

Echocardiographic assessment of left ventricular (LV) diastolic function is an integral part of the routine evaluation of patients presenting with symptoms of dyspnea or clinical concerns for heart failure. Given the presence of diastolic dysfunction in many cardiovascular diseases, clinical reports should include comments on diastolic function and/or LV filling pressures whenever possible. The 2016 American Society of Echocardiography (ASE) and European Association of Cardiovascular Imaging (EACVI) Guidelines for Diastolic Function Assessment (1) sought to simplify the clinical approach (1). Application of the algorithm from the 2016 guidelines was limited by incomplete data, conflicting parameters, and/or uncertainty about inclusion and exclusion criteria, resulting in an unacceptably high frequency of unclassifiable or indeterminate cases. In the interval since the 2016 guidelines were published, new data on additional echocardiographic variables (e.g., left atrial [LA] strain), and their association with LV filling pressures have emerged.

Contributed by
Sherif F. Nagueh, MD, FASE, and
Danita Y. Sanborn, MD, FASE

In the July 2025 issue of *JASE*, Nagueh et al. (2) publish updated comprehensive guidelines for the Evaluation of Left Ventricular Diastolic function by Echocardiography and for Heart Failure with Preserved Ejection Fraction Diagnosis. The 2025 update has two primary goals:

1. **To provide a more contemporary approach for the assessment of LV diastolic function and the estimation of LV filling pressures, and**
2. **To discuss the application of echocardiography in patients with heart failure with preserved LV ejection fraction (HFpEF).**

The updated guidelines, which replaces the 2016 document, have three main sections: one for the general population, a second for specific populations that require deviation from the general approach, and a third section focused on the diagnosis of HFpEF. The document also contains a summary and recommendations for diastolic exercise echocardiography, and for artificial intelligence (AI) applications in this field.

The guidelines are based on scientific work concerning diastolic function and LV filling pressure in adults studied in ambulatory and acute hospital care settings and thus should not be applied in children, normal pregnant women, or in intraoperative settings. The general algorithm in the 2025 update has been validated in a large study and has good accuracy in identifying patients with elevated LV filling pressure. For the most successful analysis of diastolic function in any given case, the echocardiographer should have a solid understanding of the physiologic rationale behind each variable, the situations that make any given variable less reliable, the proper acquisition technique, and the correct analysis of the echocardiographic variables. The guidelines document has tables that summarize the technical aspects, hemodynamic determinants, and clinical utility including advantages and limitations of each parameter used in the echocardiographic evaluation of LV diastolic function.

Numerous studies have demonstrated the association between age and echocardiographic measurements of LV diastolic function. Therefore, considering age is important when drawing conclusions about LV diastolic function. Of note, the E/e' ratio and left atrial (LA) maximum volume index have near-linear associations with incidence of heart failure or death, without evidence of a clear threshold with respect to prognosis.

In the 2025 guidelines, LV diastolic dysfunction is identified based on mitral annulus e' velocity measurements, reduced early diastolic LV filling relative to late diastolic filling and structural and functional surrogates of LA pressure and LV diastolic pressures. A septal e' velocity <6 cm/s, lateral e' velocity <7 cm/s, or average e' velocity <6.5 cm/s indicates abnormal LV relaxation irrespective of age. As to LV filling pressure, the guidelines recommend use of age-independent indices of LV filling pressure including changes in mitral inflow velocities with Valsalva maneuver, and the difference in duration between pulmonary vein atrial velocity and mitral A velocity.

In the main algorithm ***(Figure 3 from the guideline)*** for estimating LV filling pressure, the first step includes measurements of mitral annulus e' velocities, E/e' ratio, and pulmonary artery systolic pressure (or peak tricuspid regurgitation velocity in case mean right atrial pressure cannot be estimated). If all 3 measurements are concordant, a conclusion can be reached about LV filling pressure (whether normal or elevated). However, if there is no concordance, a second group

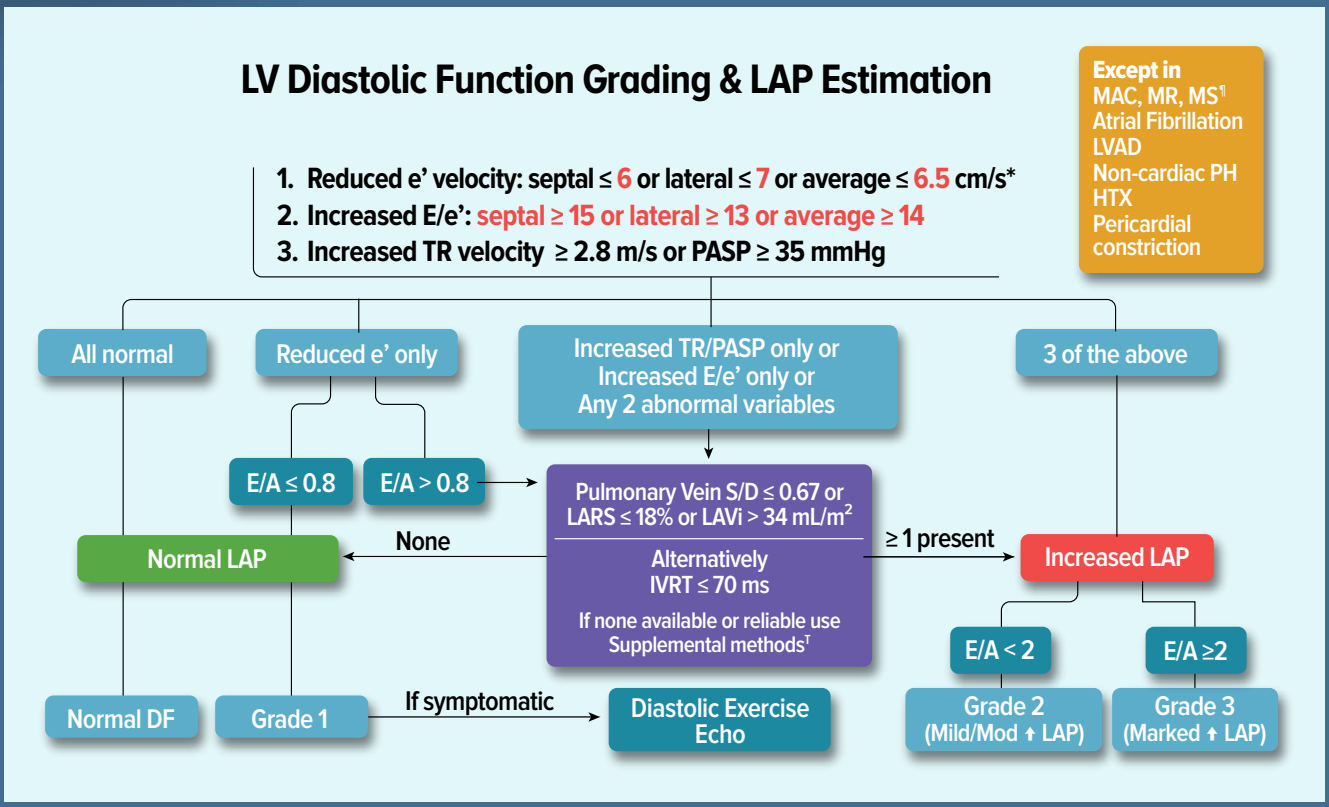


FIGURE 3 Algorithm for estimation of mean LA pressure (LAP) for patients in sinus rhythm and who do not have severe primary mitral regurgitation (MR), any degree of mitral stenosis (MS), or moderate or severe mitral annular calcification (MAC). The algorithm should also not be applied to patients in atrial fibrillation, heart transplant recipients (HTX), non-cardiac pulmonary hypertension (PH), pericardial constriction or left ventricular assist device (LVAD). *: for annular e' velocity, age adjusted lower limits of normal values shown in table 6 can be applied in place of the values shown in this figure. Ţ: refers to PR end diastolic velocity ≥ 2m/s, pulmonary artery diastolic pressure ≥16 mmHg, mitral inflow L wave velocity ≥ 50 cm/s, Ar-A duration > 30 ms, and/or a decrease in mitral E/A ratio ≥50% with Valsalva. ¶: algorithm should also not be applied to patients with mitral valve repair, mitral valve replacement, or mitral-transcatheter edge to edge repair. (This figure is from Recommendations for the Evaluation of Left Ventricular Diastolic Function by Echocardiography and for Heart Failure With Preserved Ejection Fraction Diagnosis: An Update From the American Society of Echocardiography, published in the July 2025 *Journal of the American Society of Echocardiography*. Reprinted with permission from Elsevier Inc. on behalf of ASE.)

of echocardiographic measurements is relied on, including LA reservoir strain, pulmonary vein systolic velocity to diastolic velocity ratio, LA maximum volume index, and isovolumic relaxation time (IVRT). Supplemental measurements that can be utilized if the above measurements are absent or not of satisfactory quality include pulmonary artery diastolic pressure, pulmonary regurgitation end diastolic velocity, mitral inflow L wave velocity, pulmonary vein atrial velocity amplitude and duration, changes in mitral inflow pattern with Valsalva, and premature termination of mitral inflow prior to QRS complex and diastolic mitral regurgitation. The guidelines contain dedicated sections on how to assess diastolic function in patients with valvular heart disease, atrial fibrillation, pulmonary hypertension, heart transplant recipients, restrictive cardiomyopathy, hypertrophic cardiomyopathy and how to differentiate restrictive cardiomyopathy from pericardial constriction.

The newly included section dedicated to HFpEF diagnosis recommends the consideration of

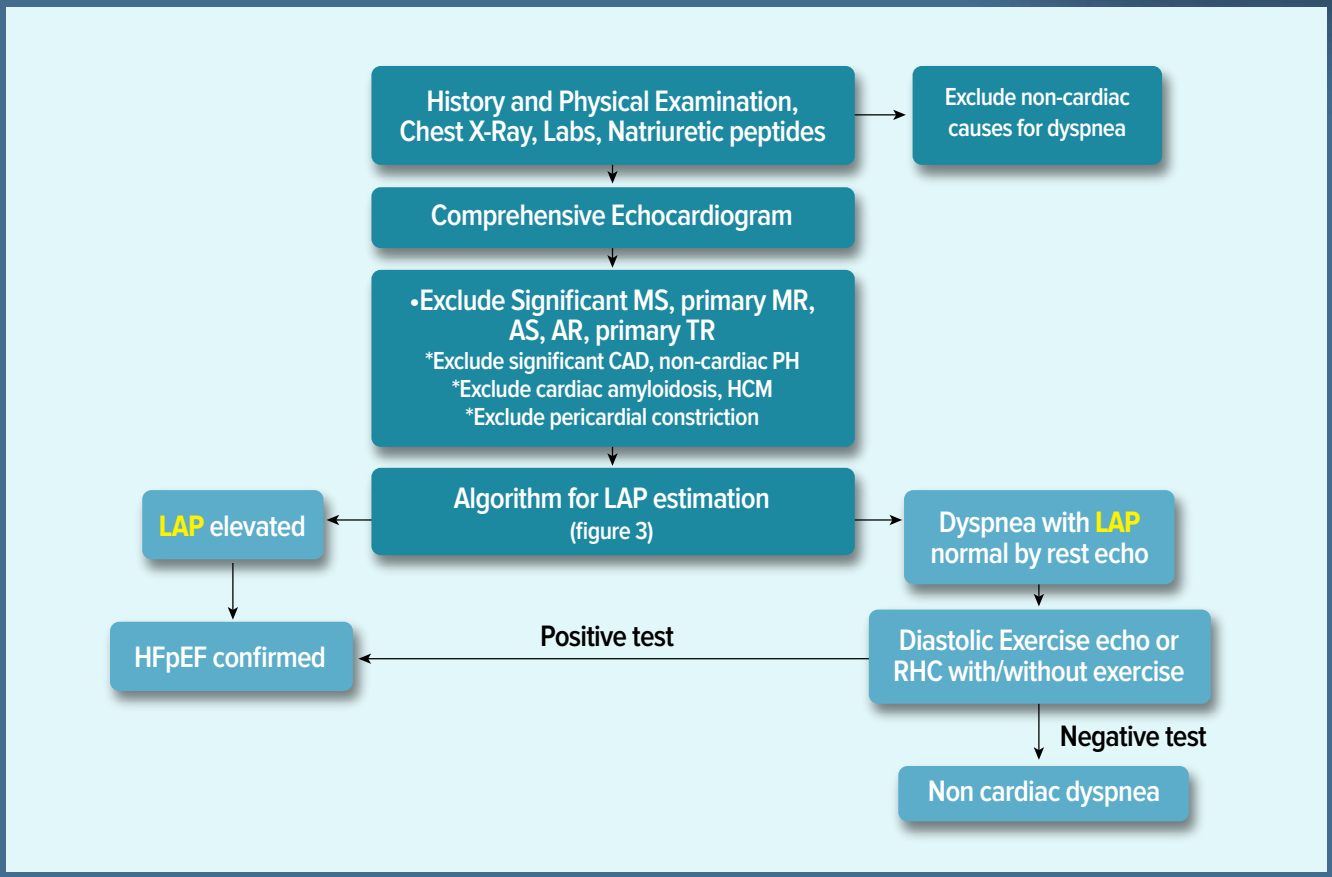


FIGURE 9 Algorithm for HFpEF (heart failure with preserved EF) diagnosis. *: multimodality imaging and cardiac catheterization should be utilized as needed to establish the presence of alternative diagnoses to HFpEF. (This figure is from Recommendations for the Evaluation of Left Ventricular Diastolic Function by Echocardiography and for Heart Failure With Preserved Ejection Fraction Diagnosis: An Update From the American Society of Echocardiography, published in the July 2025 *Journal of the American Society of Echocardiography*. Reprinted with permission from Elsevier Inc. on behalf of ASE.)

clinical data, radiographic findings, and natriuretic peptide levels in trying to determine whether there is a cardiac cause for dyspnea. The next step ***(Figure 9 from the guideline)*** in evaluating patients with concern for HFpEF diagnosis is a comprehensive echocardiogram that includes the acquisition and measurement of LV global longitudinal strain and LA reservoir strain. Importantly, before reaching a diagnosis of HFpEF, valvular heart disease, non-cardiac pulmonary hypertension, significant coronary artery disease, infiltrative and hypertrophic cardiomyopathies, and pericardial constriction should be excluded. The 2025 guidelines recommend applying the main algorithm for the estimation of LV filling pressure (see above) as the next step. If LV filling pressure is elevated at rest in symptomatic patients, HFpEF diagnosis is reached. However, if LV filling pressure at rest is normal in a symptomatic patient, the next step is diastolic exercise stress echocardiography. If positive, HFpEF diagnosis is reached. If negative, then non-cardiac cause of dyspnea is present. If the test is inconclusive, then the next step should be right heart catheterization.

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ASE is pleased to announce the 2025-2026 Board of Directors. The ASE Board of Directors oversees the organization's mission and strategic direction, ensuring the highest standards in education, research, and clinical practice. Positions on the ASE Board of Directors are filled through a nomination process and are open to any active member regardless of specialty.

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In Memoriam: Roberto M. Lang, MD, FASE

Contributed by **Alan S. Pearlman MD, FASE**, Past-President, ASE, and Editor-in-Chief, Emeritus, JASE, **Victor Mor-Avi, PhD, FASE**, Deputy Editor, Emeritus, JASE, and **Michael H. Picard, MD, FASE**, Past-President, ASE, and Editor-in-Chief, Emeritus, JASE

Roberto M. Lang MD, FASE died on June 10, 2025, at the age of 73 years, after a short illness. He was the 20th President of the American Society of Echocardiography (ASE), serving between June 2009 - June 2010. He was the A.J. Carlson Professor of Medicine in the Section of Cardiology at the University of Chicago.

Roberto was born in Buenos Aires, Argentina. He pursued undergraduate and medical studies at the Universidad Nacional de Buenos Aires, where he ranked first in his medical class and received his MD degree *summa cum laude* in 1976. He then moved to Israel for training in Internal Medicine. After serving as an Intern at the Hadassah Medical Center in Jerusalem, he did Residency training in Tel Aviv at the Tel-Hashomer Hospital, and Cardiology training at the Meir Hospital. Next, he moved to the United States, where he did an additional Residency in Internal Medicine at the University of Wisconsin. In 1983, he became a Fellow in Cardiology at the University of Chicago, remaining at that institution for the rest of his career. Following fellowship training, his academic standing advanced steadily; in 1997, he was promoted to the rank of Professor of Medicine in the Section of Cardiology. He held a secondary appointment as Professor of Radiology. For the last 33 years, he was the Director

of the Noninvasive Cardiac Imaging Laboratory at the University of Chicago Medical Center. For the past 20 years, he also served as the Director of the University of Chicago's Cardiac Imaging Center.

Roberto's 42-year tenure at the University of Chicago was marked by numerous accomplishments. He authored or co-authored more than 700 original manuscripts discussing a wide range of topics, from verapamil-digoxin interactions to three-dimensional echocardiography. He co-authored more than 125 textbook chapters and served as editor or co-editor of 11 textbooks, including all three editions of ASE's *Comprehensive Echocardiography* textbook.

Because of his important contributions, Roberto was the recipient of noteworthy awards from many organizations. These included the ASE's Richard Popp Excellence in Teaching Award (2008), the EuroEcho's Honorary Lecture (2012), the ASE's Edler Lecture (2012), the Society of Cardiovascular Anesthesiology's Arthur E. Weyman Lecture (2014), the ASE's Meritorious Service Award (2015), the Gregorio Marañon Hospital's Edler Medal and Uriarch Prize for Contributions to Echocardiography (2004), the Mexican National Society of Echocardiography's award for a Distinguished Career and Contributions to Echocardiography (2013), and the Cuban Society of Echocardiography's Gold Medal (2017). Roberto was also the recipient of multiple awards from the University of Chicago for his skills as a teacher and mentor. He served as the research mentor for more than 25 physicians, scientists, and veterinarians from around the world, many of whom have gone on to leadership positions in academic medicine. It is not surprising that in 2024, Roberto received the ASE's Mentorship Award. Posthumously, he was given the Faculty Teaching Lifetime Achievement award by the University of Chicago (2025).

In his work and in his writings, Roberto insisted on examining the factors needed for excellence: excellence in technology, in technique, in application, and in interpretation.

Roberto was a strong supporter of the ASE. He served on 13 Committees, chairing many of them. He also chaired numerous ASE writing groups. One of his most impactful efforts was as chair of the writing groups for the two published versions[1], [2] of the ASE's Chamber Quantification guideline. He was also the chair of the updated document that is currently under development. The 2015 version of this document,[2] co-published in the Journal of the American Society of Echocardiography (JASE) and the European Heart Journal – Cardiovascular Imaging, is the most highly cited paper in the echocardiography literature to date.

While developing the guidelines for chamber quantification, Roberto recognized that these documents were not robust, since they focused on normal values from North America and Europe. He realized that the normal values for many cardiac structures varied as a function of sex, age, ethnicity, and race. So, working with Federico Asch (at the time, chair of ASE's Guidelines and Standards Committee), Roberto endeavored to circumvent this limitation. With the support of the ASE, Drs. Lang and Asch organized a study to establish normal values for cardiac structure and function that could be applied worldwide. They identified experts in cardiac imaging from around the world and persuaded them to become investigators in a study supervised by the World Alliance Societies of Echocardiography (WASE). The WASE investigators enrolled normal subjects of a wide age range from multiple countries and races in order to define normal values of cardiac parameters that could be used globally.[3] To date, the WASE research consortium has published approximately 40 papers on this topic.

While also involved in many other professional organizations, Roberto's leadership role in the National Board of Echocardiography (NBE) is especially worthy of note. At the time of his death, he was serving as President of the NBE. During his tenure in NBE's leadership track, he led the Board's collaboration with the Sociedad de Imágenes Cardiovasculares de la Sociedad Interamericana de Cardiologia (SISIAC) that brought echocardiography certification exams to South America. Roberto played an important role in the development and rollout of the NBE's new interactive platforms for Maintenance

FIGURE LEGEND: Sonographers (in costume) acting out how an ultrasound enhancing agent can be used to identify a patent foramen ovale (PFO) and to assist in transcatheter device closure.

PANEL A (Left): After administration of agitated saline contrast, many microbubbles are seen in the right atrium. A few microbubbles are also seen in the left atrium, indicating a right-left shunt.

PANEL B (Below): During transcatheter placement of an "umbrella device," closure of the PFO is imaged.

of Certification in Echocardiography (MOCE) and Maintenance of Testamur in Echocardiography (MOTE). At the time of his death, Roberto was working with incoming NBE President Allan Klein on a certification exam for interventional echocardiography. He also represented the NBE in a coalition that is developing an examination and maintenance of certification for cardiovascular multimodality imaging.

Roberto was a passionate educator. A valued speaker on many topics related to echocardiography, he is probably best known for his lectures focused on three-dimensional echocardiography (3DE). Recognizing this skill, one of us (MHP) tasked him with developing a "hands-on" teaching module for the 18th Annual Scientific Sessions, held in 2007.[4] Under his guidance, in this setting the audience sat at workstations and learned how to crop, display, and measure 3DE data sets. This approach became known as the Learning Lab, and with additional help from Bijoy Khandheria and others, it expanded to include quantitation and analysis of many other aspects of the echocardiographic exam. The Learning Lab has become a mainstay of the ASE annual meeting and many of the Society's continuing medical education offerings.

Roberto directed research in several important areas. These included evaluating left ventricular function (noting the importance of ventriculo-arterial interactions), using cardiac ultrasound techniques to assess left ventricular mechanics, using three-dimensional imaging to identify the effect of pacing leads on tricuspid valve function, early studies characterizing degenerative mitral valve disease prior to repair, and numerous investigations focused on the right ventricle. He was particularly interested in, and a leading advocate for, the value of volumetric imaging

using (3DE). His group led early investigations that identified why LV volumes measured using real time 3DE systematically underestimated true LV volumes, and established conventions to minimize this difference.[5] As a clinician with a detailed understanding of 3DE technology, Roberto also understood the importance of collaborating with ultrasound engineers to make sure that their products were relevant, useful, and understandable to clinical echocardiographers. Most recently, he became interested in AI (artificial intelligence). He made important contributions to machine learning techniques now used for automated quantitation of cardiac chambers.[6] While he emphasized the importance of technical excellence, Roberto also knew that accurate diagnostic data were most important when they enhanced clinical outcomes.

Given our own involvement with JASE, we found Roberto's support of that journal to be especially noteworthy. According to the National Library of Medicine, between 1991 and 2025, Roberto and his co-authors published 186 original scientific papers in JASE! The number of publications is remarkable, but we find the quality of those publications to be equally laudable.

While numbers confirm the prolific nature of Roberto's academic productivity, his personal qualities are at least equally remarkable. We think it appropriate to expand on several descriptors: dedication to excellence, consummate educator, humility, and sense of humor. In his work and in his writings, Roberto insisted on examining the factors needed for excellence: excellence in technology, in technique, in application, and in interpretation. His work demonstrated "how to do it right." Roberto was also committed to international outreach; he helped to organize the first Echocardiography Societies World Summit (held in 2011 in Buenos Aires) and was a strong supporter of ASEF's global health outreach. He loved to share his insights in a quiet, matter-of-fact way with all who were interested in learning – and did so in a supportive manner. Notwithstanding his world class accomplishments, Roberto seemed happiest when his students succeeded, rather than when he himself received accolades. He was loved by the people with whom he worked; they thought of him as a unique human being with a big heart. In remembering Roberto, one of his colleagues noted that "He believed in me before I learned how to believe in myself."

Those who knew Roberto enjoyed his sense of humor and his playful spirit. A prominent fixture in his office was his collection of Coca-Cola cans from around the world. For years, he prepared video presentations for use during Echo Jeopardy events at ASE's Annual Scientific Sessions. Apparently, he and a team of equally imaginative sonographers took over the atrium of one of the hospital buildings, during off-hours, and acted out – in pantomime – various echocardiographic findings. Roberto would mention a given diagnosis, and the sonographers, dressed in sheets and using simple props, would act out the echocardiographic appearance of that condition. **(Figures 1 A & B)** He loved to laugh, and enjoyed making others laugh. True to form, presentations such as this were not only humorous and highly entertaining, but also imaginative and educational.

Roberto Lang will be missed by his family (wife Lili, children Gabriel [Lindsey] and Daniella, and grandsons Jacob and Levi), and by his "echo family" of colleagues at the University of Chicago, his large ASE family, his colleagues at the National Board of Echocardiography, and his many international friends. May Roberto's inspiring life be a blessing to all who knew him.

We encourage readers to watch a YouTube video interview of Dr. Lang, conducted in 2009 by Dr. Randy Martin, which can be accessed using the link "Roberto M. Lang, MD, FASE, ASE President 2009-2010."

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WHAT I LEARNED FROM THE ASE LEADERSHIP ACADEMY

Contributed by
***Bhaskar Arora, MD, FASE**,*
Oregon Health & Science University, Portland, OR

IT WAS SUMMER OF 2022 when I received the news that I had secured a highly coveted spot in Cohort 3 of the ASE Leadership Academy (LA). This was my second attempt at the LA application, and I was really looking forward to it. However, I was not sure what to expect from the program. I was unsure about setting my personal goals to measure my own success as I completed this 18-month longitudinal course.

We met in Washington, D.C., in the fall of 2022, for the kickoff meeting and were greeted by several prominent ASE leaders who shared their personal stories and their vision for how the LA can help transform ASE's future. The kickoff meeting was a bonding exercise since our cohort only met

in person twice after that because the rest of the monthly sessions were virtual. We also met the program director, Dr. Vera Rigolin, who is a very passionate leader and got us off to a great start. The curriculum was designed and executed by Kathy Pearson, a fantastic and experienced educator, who shared a glimpse into what the next 18 months were going to look like. After the kickoff meeting, we attended virtual monthly meetings which Kathy pre-planned.. She shared the agenda with reading materials, podcasts, and short YouTube videos which were helpful in our preparation for the session. Most sessions had an invited faculty (not always necessarily from ASE) who were experts in the content matter. A broad range of non-medical topics were discussed such as negotiations, understanding finances, teaming, etc. Some of the courses had a bigger impact on me than others . In the beginning I struggled to apply these principles in my day-to-day life. However, over time I noticed a shift in my approach to challenges that I encountered both professionally and personally and the teachings from the program helped me navigate those. Below are some of those core values I gained that I carry with me today.

1. **Influence and Persuasion:** This was perhaps the most helpful but also the most difficult one for me to adopt. Before participating in the LA, I was not practicing these principles during high stakes meetings (eg. negotiating title, salary etc.). The key is to prepare ahead of time and put yourself into the other person's shoes so you can see their perspective. I realized that I was so focused on fulfilling my own agenda during an important negotiation that it was hard for me to appreciate the other person's perspective. Being aware of the other person's priorities and motivations are key to reaching common ground. The focus here is to establish trust and rapport before you start negotiations. Anticipating the questions that could arise during the meeting and preparing responses in advance is helpful.

   Remembering these **4 C's** can be helpful:
   1. **Consider** other person's perspectives
   2. **Connect:** align you style to establish trust
   3. **Communicate:** clearly and effectively using the **PCAN** model.
      P: What is the Problem?
      C: What is the Cause?
      A: Answer or solution.
      N: Net benefit. Summarize why your answer is the best.
   4. **Commit:** Ask for action.

2. **Active Listening:** This is a seldom recognized leadership quality and is often lacking in many leaders. I never knew how powerful active listening can be until I started practicing it and it was not easy at first. My brain was always firing trying to interrupt and hijack the conversation but I have become more intentional about not allowing that to occur now. This has changed my perspective about almost everything, both processionally and personally. I am able to acknowledge what the other person is telling me and hear their story without providing instant advice or opinion. I realized that people simply want to be heard and are not always seeking my advice.

3. **Imposter syndrome:** It is very real. I always knew about this but did not realize the scope until I heard others talk about this issue and how they cope with it. It was inspiring to hear Dr. Rigolin, ASE Past President, mention that she still has self-doubts too and how she deals with it. I think being aware of this allowed me to be more forgiving of my own failures and reminded me that I am not alone.

> In the beginning I struggled to apply these principles in my day-to-day life. However, over time I noticed a shift in my approach tochallenges that I encountered both professionally and personally and the teachings from the program helped me navigate those.

4. **Teaming:** This is hard. It is so much easier to work alone but working as a group takes a lot of effort. In some of the in-person workshops, we were asked to perform a group exercise that required not only working together but also tested critical thinking and supporting each other since the team's success depended on everyone's performance. One of our sessions was on design thinking and we were assigned a small project. The task was to come up with a creative solution to tackle the issue of sonographer retention in echo labs. As an individual we all did great, but when we worked together as a team the collective product was always better than anything that we could individually create.

5. **Create a personal Brand:** This requires discipline and self-awareness. One must be aware of their unique talents and work from a place of strength. We all have something that separates us from others in the group and polishing that skill is the key. This is very helpful for recognition not only at the local institution but also at regional and national levels.

Overall, my experience and the skills I learned as a part of the ASE Leadership Academy will continue to shape both my personal and professional life forever.

CONGRATULATIONS, ASE 2025 COUNCIL TRAVEL GRANT WINNERS!

The ASE Foundation (ASEF) is pleased to announce the 2025 recipients of the ASE Council Travel Grants! Thanks to contributions toward the ASE Foundation's travel grants and scholarship initiative, ASEF is able to offer $1,000 USD Council Travel Grants to support 17 trainees' and sonographers' attendance at ASE's 2025 Scientific Sessions in Nashville, Tennessee.

JOIN US IN CONGRATULATING THIS YEAR'S WINNERS!

CARDIOVASCULAR SONOGRAPHY COUNCIL

- **Liudmyla Artinger, BS, RDCS, RVT, RDMS, RMSKS** – NYP Brooklyn Methodist Hospital, Brooklyn, NY
- **Colleen Sassack, RDCS** – University of Michigan - CS Mott's Children's Hospital, Ann Arbor, MI
- **Erica Snook, RDCS** – University of Michigan - CS Mott's Children's Hospital, Ann Arbor, MI

CIRCULATION & VASCULAR ULTRASOUND COUNCIL (CAVUS)

- **Alyssa Chang, MD** – University of Pittsburgh Medical Center-Presbyterian, Pittsburgh, PA
- **Benay Ozbay, MD** – University of Pittsburgh Medical Center-Presbyterian, Pittsburgh, PA
- **Cherie Wallpe, BS** – The Christ Hospital Health Network, Cincinnati, OH

CRITICAL CARE ECHOCARDIOGRAPHY COUNCIL (CCE)

- **Dureshahwar Ali, DO** – Riverside Medical Center, Lincolnwood, IL
- **Jessica Starr, NP** – Massachusetts General Hospital, Boston, MA
- **Alexandra Steverson, MD, MPH** – Massachusetts General Hospital, Boston, MA

INTERVENTIONAL ECHOCARDIOGRAPHY COUNCIL (IE)

- **Vinod Kumar Bhojwani, MD** – Tabba Heart Institute, Karachi, Pakistan
- **Malgorzata Maciorowska, PhD** – Military Institute of Medicine, Warszawa, Poland
- **Virna L. Sales, MD, MPH** – Cardiovascular Center Rotenburg Fulda, Hessen, Germany

PEDIATRIC AND CONGENITAL HEART DISEASE COUNCIL (PCHD)

- **Alexander Kiener, MD** – Baylor College of Medicine, Houston, TX
- **Daniel O'Meara, MD** – Emory University/Children's Healthcare of Atlanta, Atlanta, GA
- **Shannon Ruiqi Zhang, MD** – University of Michigan Congenital Heart Center, Ann Arbor, MI

PERIOPERATIVE ECHOCARDIOGRAPHY COUNCIL (COPE)

- **Tymoteusz Kajstura, MD, PhD** – Johns Hopkins School of Medicine, Baltimore, MD
- **Maninder Singh, MD** – Riverside Community Hospital, Riverside, CA

*For a full list of travel grant winners, visit the **ASEF Travel Grants page**.*

ASE American Society of Echocardiography Sound Saves Lives

ASE Foundation

ASE's Summer of Healthcare Advocacy

*Contributed by **Katherine Stark**, ASE's Director of Advocacy and Madison Schultz, ASE's Practice Advocate Manager*

June and July proved to be a crucial period for healthcare policy, with Congress passing reconciliation legislation that will significantly impact practices and patient care. As lawmakers negotiated on the One Big Beautiful Bill Act, ASE remained actively engaged in advocacy efforts, representing physician and sonographer voices in the legislative process. From targeted congressional letters to direct Hill meetings, ASE's continued advocacy throughout the summer demonstrates how societies can be an essential part of the process.

Congress Passes Reconciliation Legislation

On July 4th, President Trump signed into law the One Big Beautiful Bill Act (H.R. 1), a massive $3.4 trillion budget reconciliation package. This legislation represents the administration's domestic policy agenda and required intense congressional negotiations to secure passage. Congress passed the controversial legislation by narrow margins in both chambers, with Vice President Vance casting the tie-breaking vote in the Senate.

The final legislation implemented significant changes impacting physician practices and healthcare delivery. Most notably for physicians, the bill included a Medicare physician payment fix that provides a one-year 2.5% increase in provider reimbursements for 2026. However, the package included approximately $1 trillion in Medicaid cuts over the next decade that is projected to impact millions. The bill also included a $50 billion fund to support rural hospitals in response to concerns about the impact of the bill's Medicaid cuts.

ASE played a crucial role in advocating for physician payment reforms throughout the reconciliation process, being vocal about the critical importance of including a "doc fix" in the package and recognizing that Medicare reimbursement cuts have created massive challenges for physicians treating cardiac and vascular diseases. The Society actively engaged with both chambers of Congress, sending detailed letters to House and Senate leadership urging inclusion of physician payment updates in the reconciliation legislation. ASE's advocacy efforts were also part of a broader coalition, with participation in a multi-organizational letter signed by over 30 physician specialty societies. The letter emphasized three key priorities: inclusion of Medicare physician payment reforms, protecting access to federal medical student loans, and preventing Medicaid cuts. Throughout the

process, ASE highlighted the concerning trend that while other Medicare payment rates received substantial increases in 2025 (2.9% for hospitals and 3.7% for Medicare Advantage plans), physician payments continued to decline.

ASE Hits the Hill

In mid-July, Advocacy Committee members Dermot Phelan, MD, PhD, FASE, and Stavros Agorastos, MHA, RDCS, RVT, FASE, joined ASE staff in Washington, D.C. for the Alliance of Specialty Medicine Advocacy Conference. The Alliance is a coalition of national medical specialty societies dedicated to the development of federal health policy that ensures patients have access to the highest quality specialty care.

ASE, alongside 11 other organizations, met with House and Senate Congressional offices to educate lawmakers on policies that impact specialty healthcare. Dr. Phelan, the former Chair of the Advocacy Committee, met with the Members of Congress representing North Carolina, while Mr. Agorastos, a new member of the committee, met with the New York delegation. Dr. Phelan and Mr. Agorastos urged Congress to consider a number of key health policies that reflect both ASE and the Alliance's main concerns. The ASE members spoke about a long-term fix to Medicare physician payment that links reimbursement to the Medicare Economic Index (MEI), reforming the prior authorization process, preventing instances of upcoding in Medicare Advantage, and supporting the physician workforce by investing in additional GME residency slots.

In addition to hill meetings, ASE had the opportunity to listen to various speakers at the conference. Members heard from FDA Commissioner Martin Makary, Deputy Assistant Secretary for Technology Policy Steven Posnack, as well as many members of Congress. Notably, five of the lawmakers in attendance were also physicians serving on the House GOP and Democratic Doctors Caucuses. The speakers discussed a wide range of issues, but primarily focused on the state of reconciliation, physician payment reform, and proposed Medicaid cuts.

ASE members Stavros Agorastos, MHA, RDCS, RVT, FASE (left) and Dermot Phelan, MD, PhD, FASE (right) represented ASE member interested on Capitol Hill during the Alliance of Specialty Medicine Advocacy Conference in July 2024.

Conclusion

ASE encourages members to become actively involved in advocacy to ensure future legislation supports both physician practices and patient care. If you are interested in being an advocate, please join the ASE Advocacy Network Connect Group. Through the Connect Group, you will be provided with updates on major legislative and regulatory actions and the opportunity to have your voice heard by lawmakers.

ECHO

ASE'S MISSION

To advance cardiovascular ultrasound and improve lives through excellence in education, research, innovation, advocacy, and service to the profession and the public.