





Inaugural Echo in Pediatric and Congenital Heart Disease Virtual Experience ASE Advocacy — A Long-term Commitment

> Cardiac Sonography – How Did this Important Profession Begin?

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VOLUME 11 ISSUE 8 AUGUST 2022



# 2022-2023 EDUCATION CALENDAR

#### Advanced Echo: Echo Access Virtual Experience

Featuring the best content from Echo Hawaii and State-of-the-Art Echocardiography

Content available now With access until March 21, 2023. Jointly provided by ASE and the ASE Foundation

#### SEPTEMBER

Echo in Pediatric & Congenital Heart Disease: Echo Access Virtual Experience

#### September 17-18, 2022

Jointly provided by ASE and the ASE Foundation ASEcho.org/EchoinPCHD

#### **OCTOBER**

#### **10th Annual Echo Florida**

October 8-10, 2022 Walt Disney World®, Florida Jointly provided by ASE and the ASE Foundation

#### NOVEMBER

#### Critical Care Echocardiography Review Course

November 7-9, 2022 Rosemont, IL Provided in partnership with ASE and the Society for Critical Care Medicine

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

#### JANUARY

#### 32nd Annual Echo Hawaii

January 16-20, 2023 Westin Hapuna Beach Resort Kohala Coast, Big Island, HI Jointly provided by ASE and the ASE Foundation

#### FEBRUARY

#### 35th Annual State-of-the-Art Echocardiography

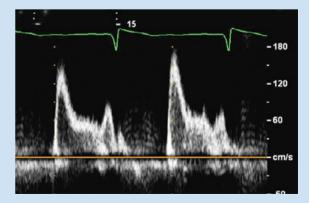
February 17-20, 2023 Westin Kierland Resort & Spa Scottsdale, AZ Jointly provided by ASE and the ASE Foundation

#### JUNE

**34th Annual Scientific Sessions** *June 23-26, 2023* 

Gaylord National Resort & Convention Center National Harbor, MD

Jointly provided by ASE and the ASE Foundation



This text also appears in the August JASE. **OnlineJASE.com** 

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Cover art: "Dilated Coronary Sinus with Unroofed Persistent Left Superior Vena Cava" Rahiba Ishanzai, CVS-BHS, RDCS II, AE, The Johns Hopkins Hospital, School of Echocardiography, Baltimore, Maryland

#### 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.

### ASE ADVOCACY — A LONG-TERM COMMITMENT

Contributed by **Stephen H. Little, MD, FASE**, Cardiology Fellowship Program Director at Houston Methodist Hospital, System Director for Structural Heart, Professor of Medicine, Weill Cornell Medical College, Cornell University, and Adjunct Professor at Rice University in the Department of Bioengineering

ne of the most important facets of ASE's work on behalf of our members is to retain and advocate for the appropriate value of cardiovascular ultrasound. This is a multi-faceted and year-long effort, with volunteers, staff, and consultants taking roles to preserve ASE's access and influence policy. ASE is dedicated to ensuring that echo's value is widely known and appreciated and that your patients continue to have access to the necessary care they need.

One of the key components to this effort is direct lobbying. It is essential that ASE have the ability to get heard before senior policymakers, on both sides of the political aisle. That includes Congressional leaders and Committee leadership with jurisdiction over the Medicare program and other health programs that are drafting legislation, as well as top officials at the Department of Health and Human Services, the White House, and the Centers for Medicare and Medicaid Services

Did you know that ASE's lobbyists are on the top of the list of the most effective and influential firms in DC?

(CMS). Given the fact that nearly every recent election has resulted in a change of control of Congress or the Presidency among the two political parties, it is critical that we maintain access and credibility with both sides of the political aisle. Did you know that ASE's lobbyists are on the top of the list of the most effective and influential firms in DC? Mehlman, Castagnetti, Rosen & Thomas' (MCRT) consultants Lauren Aronson and Dean Rosen were selected to represent ASE on the Hill based on this strength and the fact that the firm is bi-partisan, both Republicans and Democrats helm its activities, assuring a voice in the "know" no matter which way the proverbial wind blows in Washington, DC. Beyond their direct lobbying, Dean and Lauren are both partners at the firm, and work with ASE daily to help shape our federal strategy and to get ASE's priorities heard by Congress and the Ad-

ministration. Before joining MCRT, Lauren was a senior Democratic staffer at the House Committee on Ways and Means, and then a senior official in the Obama Administration. In her most recent government role, she oversaw legislative affairs for CMS. Dean spent more than a decade on Capitol Hill as a staff director and legal counsel for several key House and Senate health care committees before becoming

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a partner at MCRT. For the five years before joining MCRT, he was the chief health policy advisor to former Senate Majority Leader Bill Frist (R-TN), a cardiovascular surgeon. ASE members of our Advocacy Committee and leadership join our lobbyists and participate by going to the Hill during the American College of Cardiology's (ACC) Hill Day in the fall to speak personally with members of the House and the Senate. Many years (pre-covid) we have had more than 55 ASE members participate by meeting with their legislators. One of ASE's important messages is to stop the "site neutrality" movement since this aims to lower payments in both in-patient and out-patient settings, and we continue to let policy makers know that looming payment reductions will result in limiting access to care.

Another key component is being active in the American Medical Association's (AMA) Relative Value Scale Update Committee, or RUC. To accomplish this, we hired the skills of Korris Group's Denise Garris, a former staff member and Director of Regulatory Affairs at the ACC. Each year the RUC updates the relative value units (RVUs) for selected codes. These recommendations are considered by CMS in reevaluating reimbursement for services which are paid under the upcoming year's Physician Fee Schedule (PFS). The RUC panel, which meets three times a year, makes recommendations on values assigned to new and revised codes and conducts a rolling five-year review (sometimes even earlier!) to examine CPT codes that are perceived to be incorrectly valued. Over 100 specialty societies, including ASE, support this process by collecting data and presenting recommendations to the RUC for the valuation of codes in their practice areas. When codes which affect reimbursement for cardiovascular ultrasound services are being considered, ASE, with Denise's help, prepares presentations for the RUC meetings on codes which impact our members. Drs. Michael Main, Susan Mayer, and Geoff Rose attend and provide direct representation and guidance on these coding issues. Often, to perform a reevaluation, we work with the ACC and the AMA to perform a survey to get information such as the time involved to do an echo, the amounts, types, and prices of practice expenses, etc. Since survey participants are randomly selected, and the information they provide is critical to fairly evaluate these codes, we encourage our members (if selected) to take the survey and be as thorough as possible. In addition, Drs. Peter Rahko and Kameswari Maganti provide support as ASE's AMA representatives to the AMA House of Delegates (through the Specialty and Service Society).

Another component of our advocacy effort is centered around the education of policy makers. Each year since the debut of the first ASE Value-Based Healthcare Summit in 2014, "The Role of Cardiovascular Ultrasound in the New Paradigm," we have been educating key members and stake-

holders on the value of echocardiography. Over time we have brought in high profile speakers like Senator Ron Wyden, Congressman Jim Cooper, and invited speakers from the Centers for Medicare and Medicaid Services (CMS), National Institutes of Health, and the Geisinger Health System, among others. We recently offered this Summit as part of our Scientific Session the

"Value Summit: Maintaining Value in the Echo Lab" and had presentations on the Value of ImageGuideEcho Registry in Echo Lab Accreditation, the Appropriate Use of Add-on Codes in Echo Lab (3D and Strain), and the Sonographer Shortage, Satisfaction and Career Growth.

In addition, ASE actively monitors the changes in reimbursement and provides advice. When the PFS and the Hospital Outpatient Prospective Payment System (OPPS) Final Rules

are released by CMS, we review any echocardiography codes which are selected. The Society works with leadership to submit comment letters to highlight policy changes we support and provide compelling evidence to oppose any

#### Figure 1

Dr. Mayer with Dr. Gary Gibbons, the current director of the National Heart, Lung, and Blood Institute, at an event in Washington, DC that ASE helped sponsor celebrating the 70th anniversary of the NIH.



detrimental changes. In recent years, ASE was able to work with other societies and our industry partners to prevent significant cuts to contrast codes. After the schedule is finalized, we provide an updated coding guide and a webinar to help our members best react to these changes.

We also recognize that sometimes strength lies in numbers. In addition to regular meetings with the ACC and participation in their Hill Day, we are active members of the Sonographer Licensing Coalition, the Alliance for WRMSD (Grand Challenge), the National Coalition for Heart and Stroke Research (supports the NIH), and the Alliance of Specialty Medicine. This group (the Alliance) is a coalition of 16 national medical societies. This non-partisan group is dedicated to the development of sound federal healthcare policy that fosters patient access to the highest quality specialty care. ASE has been part of their legislative fly-ins, regular newsletter communications to legislators, and has been invited to participate on regular calls, like the recent one with CMS' Principal Deputy Administrator and Chief Operating Officer Jon Blum to discuss the challenges to prior authorization. There are many issues that we are following closely including:

- Physician Reimbursement: Impending Sequester, PAYGO, and Conversion Factor Cuts
- Patient Access/Utilization
- Workforce/GME
- Medical Liability Reform

Our advocacy team knows that the future is often influenced by innovation. We work with and partner with our Industry Roundtable members and the Medical Imaging & Technology Alliance (MITA), a collective of voices of medical imaging equipment manufacturers, innovators, and product developers, to better understand the advances in the field and the way innovations might shape practice patterns. For instance, there is a great deal of interest in Artificial Intelligence (AI). However, there is also a limited amount of funding in the PFS and HOPPS to support these advances. Yet if there is no funding it will stifle innovation, so we are working to better understand these implications. In April 2021, the Advocacy Committee leadership was part of our AI Forum, and talked directly to FDA officials on this topic. We have also been leading proponents of getting add-on codes for new

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

advances, such as strain and 3D, and helping to move these to actual payments.

We also help where practice has changed, but there is not support for the physicians' (or sonographers') time. The field is getting very specialized, and one area that has had tremendous growth is the interventional echo field. While a specialty designation process for interventional echo could take up to five years or longer, the ASE's board voted to pursue this designation and recommended that this would help the field flourish.

Lastly, when the cardiovascular ultrasound field is challenged, our advocacy team is posed to react. In 2021, the state of Washington was ready to adopt a "one size fits all" plan for patient care. Dr. Mayer testified during the Washington State hearing on the need for Patient-Centered Noninvasive Testing. ASE has been able to expand the range of activities that better shape the decisions that affect medicine, including (Figure 1) helping to sponsor the 70th anniversary of the National Institutes of Health (NIH). The advocacy team also recommended that the Board of Directors author a policy statement from ASE on this issue, centering around being "patient first." This was passed on April 11, 2022, and can be found at ASEcho.org/ ASE-Policy-Statements/.



# Highlights of the 2022 Scientific Sessions

Contributed by **Rebecca LeLeiko, MD, MS, RPVI**, Emory University School of Medicine, Atlanta, GA, member of the ASE Council on Circulation and Vascular Ultrasound, and co-chair of the Circulation track at the 2023 Scientific Sessions @RLeLeiko



A full two years after our last in-person Scientific Sessions, it was wonderful to travel back to the Pacific Northwest and see so many colleagues together in one place in Seattle. FTER MORE THAN two years of virtual conferences, it was a great pleasure to be back in person at the 2022 ASE Scientific Sessions in Seattle, Washington. Due to the COVID pandemic, ASE held the 2020 Scientific Sessions virtually after they were initially slated to be in Denver. There was optimism regarding the 2021 Sessions, planned for Boston, but these too became fully virtual. Now, a full two years after our last in-person Scientific Sessions, it was wonderful to travel back to the Pacific Northwest and see so many colleagues together in one place in Seattle. The organizers showed great foresight in offering hybrid sessions, with options for both live and on-demand talks available throughout the world, and for several months following the Sessions.

As a vascular specialist on the Circulation and Vascular Ultrasound (CAVUS) Council, there were several highlights. On Friday, with many attendees just arriving, ASE held multiple networking events. This included the CAVUS Council meeting, where council members got to meet and connect with other ASE members who share our special interest in vascular ultrasound.

On Saturday, the sessions were in full swing with excellent turnout despite the ongoing pandemic and challenging times. The POCUS (point of care ultrasound) session on acute vascular disease was a particular hit. The initial didactic session was chaired by CAVUS members Drs. Christina Fanola and Matt Vorsanger. This dovetailed nicely with a DIY session on the same topics that afternoon. The organizers outdid themselves with a stimulating and educational line-up, coupled with social and networking opportunities that have been sorely missed.

CAVUS Council members enjoying the ASE Foundation Research Awards Gala

Later Saturday afternoon, the arteriopathy session featured talks by Dr. Amer Johri (former CAVUS chair) on carotid plaque, and Drs. Ricardo Benenstein and Bryan Wells (outgoing CAVUS chair) on fibromuscular dysplasia. Particularly noteworthy was a talk given by CAVUS Luminary awardee Dr. Esther Kim on spontaneous coronary artery dissection.

The President's Reception on Saturday, held in the expo, was another opportunity for networking, this time among the broader group of attendees.

Sunday's biggest vascular highlight was a session on high-risk pulmonary embolism – diagnosis and intervention. We were lucky to hear from several leaders in the field, Drs. James Horowitz, David Dudzinski, Gregory Piazza, Garvan Kane, and Merri Bremer. They discussed everything from risk stratification in acute pulmonary embolism to catheter-based therapies, advanced imaging and advanced mechanical support.

Of all the social events, the Sunday evening ASE Foundation Research Awards Gala was the highlight. With an "Emerald City" theme inspired by our host city, the organizers did not disappoint with appropriate Art





Deco décor. Our CAVUS Council shared a table with our very first CAVUS Luminary awardee, Dr. Esther Kim, and her family. Dr. Kim graciously accepted the award, telling us a moving story about her family's immigration to the U.S. While the many impressive awardees got standing ovations, Dr. Kim encouraged the audience to give a standing ovation to her deserving mother.

Monday, the last day of the Sessions, saw a smaller but dedicated crowd as attendees left to return to home and work. The vascular highlights of the day were two sessions on the aorta. The first was on screening and diagnosis of aortic disease, chaired by Michelle Cordio and Dr. Thais Coutinho. This was followed by a lively panel discussion regarding measurement techniques and surveillance of aortic disease. The second session, CODE AORTA, was chaired by Drs. Fanola and Raj Janardhanan. This session's highlight was a fascinating multimodality case of aortic repair gone wrong, presented by Dr. Jeremy Markowitz. CAVUS Council members celebrating with Dr. Esther Kim (third from the right), CAVUS Luminary Award Winner.

The conference was located downtown with easy access to the famous Seattle landmarks. When not at the conference, attendees visited the Space Needle, saw 'fish-throwing' at Pike Place Market, and jogged along the waterfront.

All in all, the 2022 Scientific Sessions in Seattle did not disappoint as our first in-person conference of the pandemic. The organizers outdid themselves with a stimulating and educational line-up, coupled with social and networking opportunities that have been sorely missed. Additional on-demand presentations are available until October 9, 2022. We look forward to another great Scientific Sessions in 2023 in National Harbor, Maryland!

Vascular sonographers and physician trainees: interested in attending Scientific Sessions next year? Please consider applying for a CAVUS Travel Grant! More information can be found here: ASEecho.org/VascularUltrasound/.

# An Overview of the Inaugural Meeting of the NEW ASE

## Critical Care Echocardiography Council Steering Committee

Contributed by **Arthur Labovitz, MD, FASE**, Critical Care Echocardiography Council Chair, Naples Cardiac and Endovascular Center, Naples, FL



On Sunday, June 12, 2022, in Seattle, Washington, the NEW Critical Care Echocardiography (CCE) Council Steering Committee met for its first official meeting. N SUNDAY, JUNE 12, 2022, in Seattle, Washington, the NEW Critical Care Echocardiography (CCE) Council Steering Committee met for its first official meeting. Gathering together in a meeting room with the members of the Council, ASE Leaders, and members of ASE that will serve as Critical Care Representatives on ASE standing committees, the room was full of energy!

The meeting started off with a live session called "Innovation Through Collaboration: Tackling POCUS Training and Education from a Multi-Specialty Perspective." This session was representative of the variety of specialties that encompass the CCE Council perspectives.

We then reviewed the Council charges as outlined by the ASE Board of Director's when approving this new Council. Council charges can be found on the CCE Council webpage. Although all the charges are important, we took a deeper focus on the following:

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Provide a forum for members with Critical Care Echocardiography interests to network. It was noted that this is a critical part of this council. Currently over 1,000 ASE members indicated that they are interested in the group. The Council would like to establish a way to disseminate the minutes to that group and establish communication representative(s) and Twitter champions.

#### Provide guidance on standards of care related to Critical Care Echocardiography to the Board and the Guidelines and Standards Committee. This is a major charge as this group engages with ASE's Guidelines and Standards Committee.

I was invited to speak as a NBE representative to the ASE Board on the use of TEE from critical care physicians. NBE has begun the discussion about adding TEE certification with required submission of 50 studies for competency review, after passing the NBE critical care echo exam. The Council held a brief discussion regarding engagement and communication with the CCE community to support appropriate relevant TEE training and competency documentation. ASE upholds a focus on quality and a "Patient First" approach in determination of the threshold number of required studies. The CCE Council welcomes the opinions of those actively utilizing TEE in the care of critically ill patients. The Council also recognized the need to standardize relevant nomenclature and proposed using *Echo* magazine as a means to educate.

Provide guidance to the Scientific Sessions Program Committee regarding appropriate educational offerings for Critical Care Echocardiography. Established at the 2022 Scientific Sessions, and continuing forward, the CCE Council will have a designated team to support POCUS/CCE track content for future ASE Scientific Sessions. In 2022, Dr. José Díaz-Gómez, from Baylor St. Luke's Medical Center, served as Track Chair and Dr. Nova Panebianco, from University of Pennsylvania, served as Track Co-Chair. The POCUS/CCE track included both live and recorded on-demand sessions. To see a complete list of content, click here.

Preparations for ASE Scientific Session 2023 in National Harbor, Maryland, June 23-26, 2023, are already underway. The Scientific Sessions Program Committee will be meeting in September to design the program. If you have an idea for a CCE session, please feel free to reach out to José or Nova.

Recommendations for other educational activities including live sessions, recorded lectures, and interactive programs with a critical care echo interest can also be channeled for approval through the Council.



Moving forward, it is the goal of the CCE Council Steering Committee to submit quarterly reports about the business of the Council.

Introductions to the CCE Council Steering Committee have already been made in the *Echo* magazine (June edition), however, the Council would like to thank those members who have agreed to serve as Critical Care Representatives on ASE Committees. Thank you for being the voice of CCE!

Advocacy - Rachel Liu Awards - Courtney Bennett CME - Mike Lanspa Education- Seth Koenig FASE, Training & Certification Advisory - Sara Nikravan Finance - Alberto Goffi Foundation Annual Appeal - Jan Kasal Governance & Compliance - Arthur Labovitz Guidelines & Standards – Smadar Kort Industry Relations - Brandon Wiley Membership – Renee Dversdal Nominations - John Klick Research - Tony Hernandez Registry - Dave Dudzinski

In this initial meeting, there were many topics brought up for discussion as the Council's work begins including: need for nomenclature; partnering with other groups including other societies and other Councils within ASE, and content/scope for an ASE CCE Guideline document. Over the course of this year, please stay tuned as we move through this process.

For now, we will focus on communication. Communication will be essential to bring all the experts to the table. Whether you are a current ASE member, thinking about membership, or just trying to keep up with the changes, the CCE Council encourages you to get involved in the conversation.

- Follow some of ASE's Twitter Champions in CCE including:
  - José L. Díaz-Gómez@Jose\_Diaz\_Gomez David Dudzinski @criticalecho Smadar Kort @SmadarKort Sara Nikravan @NikraDoc Nova Panebianco @Novaleda Vincent Sorrell @VLSorrellImages Sharon Mulvagh @HeartDocSharon
- Check out future issues of Echo magazine
- Visit the CCE Council webpage
- For ASE members, join the conversation on CONNECT@ASE
  - Log in to your ASE member portal.
  - Scroll down, find the "Councils" section, select all groups of interest.
  - Click on Critical Care Echocardiography in the "Available" box then click the ">" symbol so the group appears in the "Chosen" box.
  - Scroll to the bottom of the page, click the "Save and Refresh" button.

Moving forward, it is the goal of the CCE Council Steering Committee to submit quarterly reports about the business of the Council. Please follow along and engage as we grow! If you are interested in getting involved with the CCE Council, please reach out to Suzanne Morris, ASE Staff Liaison, at smorris@asecho.org



### Virtual Experience Inaugural Echo in Pediatric and Congenital Heart Disease

Interview conducted by Neha Soni-Patel, MEd, BSME, RCCS, RDCS (AE/PE), FASE with contributions from Bruce Landeck, II, MD, FASE, and Melissa Wasserman, RDCS, RCCS, FASE



# Q/A

Q. How did the idea of this conference come up? What are the goals of this meeting? Why will this be a different experience than other pediatric symposiums in the past?

ASE gave the green light for this initial course in a virtual format, allowing us great latitude in designing the course length, content, and format.

A. Melissa and Biff: The idea for this conference came from the ASE Council on Pediatric and Congenital Heart Disease (PCHD) while discussing how to include so much emerging science in our one dedicated Pediatric/Congenital track at the ASE Scientific Sessions, and the increasing need and desire for more pediatric and congenital echo education from a broader audience. ASE does such an incredible job with creating tailored educational events in the adult echocardiography world – such as State-of-the-Art Echocardiography. We thought, "Why not create a dedicated, congenital echocardiography conference?"

ASE gave the green light for this initial course in a virtual format, allowing us great latitude in designing the course length, content, and format. Our goal is to appeal to everyone and anyone who has interest in imaging congenital heart disease, from the adult

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echocardiographer who images newborns to the experienced cardiologist interested in the latest techniques in assessing the right ventricle of ACHD patients. While there are other pediatric cardiology symposiums, the Inaugural Echo in Pediatric and Congenital Heart Disease Virtual Course offers a more personal approach, with live, small-group sessions, two channels of learning, and a fun, diverse faculty of sonographers, physicians, and fellows. It is going to be a fantastic educational course, and there will be something for everyone!

#### Q. You have been working on quite a program for this inaugural session, what was your approach to topic selection?

A. Melissa and Biff: Sessions are themebased, similar to the Scientific Sessions. Topic selection started with our own personal interests, things we would love to learn more



about. Then, we looked into topics that have been covered in immediate past educational courses with great frequency, so as not to overlap. We then thought about our audience and made sure to have 'something for everyone.' If you are a primary research echocardiographer, we have a fun debate planned. Interested in fetal echo? We have fetal indications covered. Just getting started in pediatric echocardiography? There's a session for how to approach our pediatric patients. We also wanted to offer content focusing on some real-life challenges, such as optimizing the quality of advanced imaging modalities, discussing the tradeoff between perfection and efficiency, and how to remain resilient and protect your body while also advancing your career in a field with everincreasing demands on productivity and value. That last session we felt was important enough to simulcast on both channels. Interested in ACHD? Echo in the OR? Improving your 3D or strain game? It's all here with excellent speakers to present!

#### Q. Any advice for attendees on how to navigate the streamed sessions?

• Melissa and Biff: The Inaugural Echo • in PCHD Virtual Course offers the attendee two channels streaming different content to bounce between over a two-day period. The attendee can switch back and forth at their pleasure, seeking out the talks that interest them the most. That's the beauty of a virtual educational course! Sessions will range from 60-90 minutes with pre-recorded didactics around a theme followed by 15 minutes of live panel Q&A, where attendees live-streaming a session can submit their questions. Both channels will be recorded, allowing people to benefit from all content on-demand after the course, including getting all available hours of CME. Attendees should keep in mind that if there is one session where they particularly want to hear live discussion from the presenters, they should allow time at the end of the session to attend that part.

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#### • What has been the most enjoyable part of Chairing the sessions?

A. Melissa: Working with Biff! We started as members-at-large together in the Council on Pediatric and Congenital Heart Disease steering committee and have since published guidelines together, created webinars together. We work hard but get each other's sense of humor and so there's a lot of laughing while still being productive!

A. Biff: Working with Melissa has been great. We have experience working together as first and senior authors on the guidelines document "Recommendations for the Adult Cardiac Sonographer Performing Echocardiography to Screen for Critical Congenital Heart Disease in the Newborn" which was published last year. The friendship and easy working style that developed as part of that effort has made it a breeze to work together on this project. We are comfortable challenging each other and listening to each other carefully when we haven't agreed (which has been rare).

### Q: What has been most challenging?

A. Melissa and Biff: We have had such incredible support from the PCHD council, there have been very few challenges. We didn't struggle per se, but spent significant time making sure our faculty selections were diverse in many ways, including experience level, geographic location, sub-specialty, race/ethnicity, gender, and medical training (sonographer vs. physician). Obviously being the first attempt at this conference, with the added complexity of it being virtual, there is pressure to "get it right." We have had so much support from the PCHD community, particularly from the PCHD Council leadership (shout out to Carrie Altman, Craig Fleishman, and Piers Barker!) and the PCHD track Chair and Co-chair for the 2022 Scientific Sessions (another shout out to David Parra and Luc Young!). Through collaboration with those people in particular we have come up with what we are confident is a fantastic educational offering.

#### Q: What are you most looking forward to?

A. Melissa and Biff: We are so looking forward to the small group sessions! They are fun, challenging, and engaging case presentations created and

narrated by advanced imaging fellows from around the country. These virtual rooms, with no more than 8 attendees, will be moderated by our fantastic course faculty. There are designated breaks in the presentation for group conversation with the attendees (with cameras and mics live!). This will be the most interactive part of the entire course, and we hope it

We are so looking forward to the small group sessions! They are fun, challenging, and engaging case presentations.

gives attendees a chance to really get to learn from faculty (and each other) on a more personal level. We can't wait to see how it goes!

### O. How did you balance content for sonographers and physicians?

. Melissa: Making sure sonographers were A. included in both faculty selection and in topic selection was obviously of utmost importance to me. Fortunately, Biff and the PCHD council share my enthusiasm for sonographer-geared education so while most of the content will interest both physicians and sonographers, there are some sessions just for us, like "The Emotionally Healthy Sonographer" and "Strategies to Minimize Work-related Musculoskeletal Disorders." On the other end of the spectrum, we also have physician-based talks that focus on topics like "Finding Your Way Out of the Clinical Swamp - Career Advancement" and "Creating a Team Culture in the Echo Lab". So, there's really equal learning for everyone!

# Help Make ASE Stronger Sonographer Voices are Needed

Contributed by Keith Collins, MS, RDCS, FASE and G. Monet Strachan. ACS. RDCS. FASE



HE AMERICAN SOCIETY of Echocardiography (ASE) is the largest global professional society for all users of cardiac ultrasound imaging, including physicians, sonographers, nurses, veterinarians, and scientists. ASE depends on its members to get involved and advance our mission. When forming the organization in 1975, the Society founders recognized the unique and important collab-

By participating in leadership positions, sonographers are able to affect real change in the scope and practice of our field.

oration between physician and sonographer to provide quality imaging for the highest level of care to our patients. As such, sonographers have been invited, encouraged, and welcomed to leadership positions on the multitude of Councils, Task Forces, Committees, and the Board of Directors. Ensuring a sonographer voice when making important decisions, the Secretary position on the

Executive Committee has been reserved for a cardiac sonographer. Sonographers have also served as Council Representative and most recently, Dr. Carol Mitchell served as firsttime sonographer Treasurer.

Sonographers play an integral role in the echocardiography field and fulfilling the ASE mission. By participating in leadership positions, sonographers are able to affect real change in the scope and practice of our field. Sonographers have first authored significant Guidelines and Recommendations documents, which increase quality and care by echo providers internationally. As chairs and co-chairs of Committees and Task Forces, they are able to actively work with physician and other echo leaders to significantly impact echo education, research, and collaborations across the United States and the world. Many past sonographer leaders in ASE find that confidence in voice while volunteering with ASE, which then advances their standing and practice at their own institutions.

The ASE Leadership Academy was developed to grow ASE sonographers and physicians to lead at the highest levels. Despite such efforts, sonographer applicants for ASE leadership positions to the Board and Committee Chairs continued to decline.

In recognition of the valuable input made by sonographers, the Board established the Five-Year Sonographer Leadership Task Force in Fall 2021. Co-Chaired by Keith Collins, MS, RDCS, FASE, and Neil Weissman, MD, FASE,

the Task Force is charged with determining causes for the decline in sonographer leadership applications and finding solutions to increase sonographer representation. The Task Force is also comprised of ASE Past Presidents and leaders, Drs. Judy Hung, Ray Stainback, Jonathan Lindner, Susan Wiegers, and Cynthia Taub, as well as sonographer leaders, Monet Strachan (current ASE Sonography Council Chair), Lanqi Hua, Madeline Jankowski, and Alicia Armour. ASE CEO, Robin Wiegerink, also contributes.

Sonographers have long felt real and perceived barriers to their advancement in the echocardiography field. To gain more tangible data to understand barriers, a survey was created and sent to all FASE sonographers to determine what are the impediments to their participation as leaders on the ASE Board or Committee Chairs.

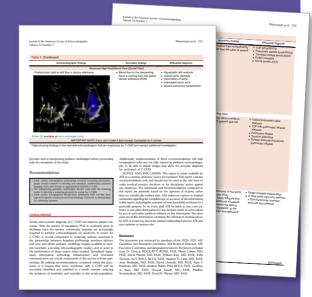
#### Results of the survey showed three main barriers that need to be addressed.

- 1. Financial Conflict of Interest: Some sonographers are not able to take leadership positions with ASE due to their financial ties with industry.
  - As with physicians, sonographers cannot serve on the Board or as Chair of a Council, or some Committees or Task Force if they have a financial conflict of interest when working for industry in educational or speaking capacity. Because of the pay disparity between sonographers and physicians, it is harder for sonographers to decline these industry opportunities to take on a role in ASE leadership.
- 2. Financial Constraints for In-person Meetings: Some sonographers are unable to attend live meetings due to travel expenses.
  - As institutions face budget constraints and staffing shortages persist, it is increasingly difficult to secure time away from work. In addition, meeting expenses have become cost-prohibitive for many.
- 3. Lack of Physician/Hospital Support: Some sonographers are fortunate to have the support of a physician champion or hospital to advocate and support engagement in ASE activities. Some sonographers do not have this support and therefore do not have the time to devote to serving ASE.
  - Many sonographers also shared that they feel a lack of support from their institutions or physician leaders, making participation for meetings difficult.

#### Sonographer-driven Guideline and Recommendation Documents



▲ Guidelines for Performing a Comprehensive Transthoracic Echocardiographic Examination in Adults: Recommendations from the American Society of Echocardiography



Recommendations for the Adult Cardiac Sonographer Performing Echocardiography to Screen for Critical Congenital Heart Disease in the Newborn: From the American Society of Echocardiography

#### Peg Knoll, RCS, RDCS FASE, Sonographer Lifetime Achievement Award winner, 2015

"I became a member of ASE in 1979 & a volunteer in 1989 after attending the 1st ASE Scientific Sessions in Arlington Virginia. The excitement of this meeting was infectious. We found "our people." People who understood the images we were looking at and the language we spoke. I have only missed a few Scientific Sessions since then.

Being a sonographer volunteer has a completely different benefit for our professional career growth than our physician



counterparts, especially in the academic settings. As sonographers, we do not need to publish to get promoted. Volunteering with our professional organization gives us confidence to lead, establish contacts across the country, compare our knowledge with other experts in the field, to speak in committee

meetings with physicians on equal levels, unlimited networking opportunities, and a worldwide work family. These are all skills that can be used in your "real job."

The role of sonographer has changed and advanced since I first joined. The working relationships between all the members has also changed for the better. Cardiac ultrasound is and always has been a team sport, with our team is growing to include more healthcare professionals. It will continue to evolve.

ASE has always been an organization that has promoted mentoring of new members, which I have always admired."

#### Ashlee Davis, BSMI, ACS, RDCS, FASE

"Taking on leadership roles in ASE has given me the confidence to step outside my comfort zone and take on new projects both within the ASE as well as in my own



institution. One of the most valuable gifts of volunteerism has been the friends and mentors I have met along the way. They have been an invaluable resource for me as I grow in my career, and I hope to continue in their footsteps and one day be that person for someone else!" The strength of ASE is its members who volunteer their time and talents to achieve its goals in education, research, advocacy, innovation, and service to the echocardiography profession and the public. The Board of Directors wants sonographers to know they are a valued and an important voice in the organization. This Task Force will attempt to resolve these barriers to have greater sonographer representation in leadership roles.

To accommodate greater participation, meetings of the Board, Committees, Councils, and Task Forces are now better coordinated with sonographer work schedules in mind. Virtual attendance, evening, and weekend meetings are part of these improvements. Also, to increase sonographer applications in the Nominations process, ASE quickly changed its policy so that submissions can now be held/considered for two years, including the recommendation letters.

In the next few months and years, ASE and this Task Force will be committed to increase sonographer engagement and may reach out to ask your opinion. If you already have ideas, suggestions, please reach out to Suzanne Morris, ASE's Director of Volunteer Activities (smorris@asecho.org). Sonographers are HIGHLY ENCOURAGED to see the host of volunteer positions available, including leadership positions, and apply. Learn more about how to get involved and start planning now to apply when positions open this fall.

For those who have volunteered with ASE, and felt inspired to continue and lead, this professional organization has become an important outlet for professional advancement and continual growth. Working closely with echo-focused physicians and sonographers has also provided a professional family for support, networking, and care, particularly through the pandemic. Please help make ASE stronger by adding your sonographer input by applying for an open volunteer position this year, or encouraging a sonographer you know to apply.

ASEcho.org/GetInvolved

#### Sonographer VOLUNTEER OF THE MONTH Congratulations Allyson Boyle

#### When and how did you get involved with cardiovascular ultrasound?

In 2000, I had just graduated with a Bachelor of Health Sciences and was working as a Dietician. I was

considering continuing my education in Nutrition by attending graduate school. Around this time, my dad told me he had just heard about a new cardiovascular technology program that was being offered by a local community college in Charlotte, North Carolina. He heard the field had great opportunity. I decided to apply and was admitted. I began my clinical internship with Sanger Heart and Vascular Institute and was hired as a student sonographer in 2001. In 2002, I graduated and was offered a fulltime position. In 2006, I began teaching part- time at the same cardiovascular technology program I graduated from. In 2015, my Medical Director noticed my interest in continuing education and suggested I get my MHA. He felt that with this degree I could more easily promote positive change within the field. I agreed but wanted to pass the ACS first. After I passed the ACS exam in 2019, I decided to apply to graduate school and received my MHA in 2021.

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

I am a Manager at Atrium Health with Sanger Heart and Vascular Institute in Charlotte, North Carolina. I oversee 34 Cardiac Sonographers in both outpatient and inpatient facilities. Our practice is recognized nationally as the regions top-rated heart and cardiovascular institute.

#### When and how did you get involved with the ASE?

Sanger believes (and wants) its sonographers to be involved with the ASE. I joined in 2004. I was then

encouraged to apply for FASE by my mentor Sabrina Black BS, RDCS, FASE. I then began to apply to serve on ASE committees.

#### Why do you volunteer for ASE?

I volunteer for the ASE because I enjoy collaborating with those who share the same passion as I do. Volunteering inspires me to continue to learn and grow as a sonographer while functioning in a more administrative role.

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

Most recently, I was invited to serve as Chair- elect on the Sonographer Steering Committee. I am very excited about this opportunity. I am also currently serving a two-year term on the ASE Foundation Annual Appeals Committee and Governance & Compliance Committee. In 2019, I served on the Bylaws & Ethics Committee. I am a member of the North Carolina Ultrasound Society as well and spoke this summer at our annual meeting on Carcinoid Heart Disease.

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

I urge sonographers to get involved with ASE and to find ways to develop professionally. And, for those eligible, to apply for FASE to help provide the confidence you need to accept more responsibility within the society. I would also encourage all eligible sonographers to sit for the Advanced Cardiac Sonography exam.

#### What is your vision for the future of cardiovascular sonography?

My vision for the future is to continue to develop ways for all labs to improve quality while focusing on ergonomic techniques and advocating for all sonographers.

# SUBMIT YOUR CASE

The ASE Council on Cardiovascular Sonography Steering Committee in collaboration with the ASE Board of Directors, issued a challenge recently to ASE sonographer members around the world to submit cases to CASE. The first ten articles accepted would have their processing fee waived (valued up to \$950 per accepted case). Three sonographer-led papers were recently accepted, and were awarded this waiver. Submit your case to have the chance to use one of the remaining seven waivers!

Email **Debbie Meyer**, Director of Publications (JASE, CASE), or **Andie Piddington**, Deputy Managing Editor (JASE, CASE), with any questions or to request a case-writing mentorship from an ASE sonographer.



# - HOW DID THIS IMPORTANT PROFESSION BEGIN?

previous article in *Echo* magazine<sup>1</sup> noted that ASE has now facilitated a series of online video interviews of 25 ASE Past Presidents, with plans to interview another group who recently completed terms as President. These videos can be accessed from the ASE website and viewed on YouTube, and they provide interested members (especially younger members – but not limited to that demographic) a means to see the people who served as ASE leaders, listen to them discussing their first experiences with echocardiography and the ASE, and hear about some of the major issues demanding their attention during their presidential terms.

These interviews will give ASE members a palpable sense of some of the people who helped the Society to advance to where it is today. However, it would be misleading – and indeed wrong – to imply that ASE's leaders deserve all the credit for the successes that our field, and our Society, have witnessed. In truth, many other groups have played noteworthy roles in the evolution of echocardiography and ASE. This and future articles will focus more specifically upon those important groups.

Since its inception, ASE has encouraged the value of diversity. Membership has always been open to any and all clinicians and scientists who understand the value of cardiac ultrasound

in patient care and the importance of excellence in its clinical application, and who are committed to providing the right test to the right patient at the right time. One feature that



Contributed by Alan S. Pearlman, MD, FASE, ASE Past President, and Editor-in-Chief, Emeritus, *Journal of the American Society of Echocardiography* (JASE)

In truth, many other group have played noteworthy roles in the evolution of echocardiography and AS makes echocardiography unique among clinical techniques – in the United States and increasingly in other parts of the world – is the **partnership** between physicians and sonographers that is an inherent part of this clinical discipline. In an Editor's Page written early during my tenure as Editor-in-Chief of JASE I noted that "As practiced in the United States, echocardiography is – and has been for many years – a team sport."<sup>2</sup> I also wrote "In a team sport, unless all team members play their best, the result may be a poor outcome."<sup>2</sup> I believe that these words, written more than 13 years ago, continue to ring true.

So how did the profession of cardiac sonography begin, and how has it evolved? Before addressing

those questions, a few relevant points are of note. First, this is a big topic, and space limitations dictate that I address it in a series of shorter articles rather than in a single lengthy treatise. Second, while I have been blessed to work with – and to learn from –

many wonderfully skilled cardiac sonographers, where possible I will focus on sonography rather than sonographers. This may seem a subtle distinction, but I worry that if I were to emphasize individuals, I might offend some sonographers who I have inadvertently neglected to mention by name. Of course, I could simply list – in either alphabetical or chronological order – every one of the sonographers with whom I've been fortunate to interact over my long career, but this would be more akin to a writing a phone book rather than a story. I've heard it said that while a phone book includes many interesting characters, the plot is hard to follow! ASE membership records remind me that over the years, cardiac sonographers have made up 30-40% of ASE's membership. An online statement from the Mayo Clinic<sup>3</sup> notes that "Cardiac sonographers ... are healthcare professionals specially trained to use imaging technology to help physicians diagnose heart problems in patients." How did this "healthcare profession" get started, and how has it evolved?

I believe that the story starts with sonography, while specialized applications such as cardiac sonography came later. It is always difficult to identify with certainty what (and who) came first. In a recent publication on the history of echocardiography,<sup>4</sup> which I commend to readers interested in

"As practiced in the United States, echocardiography is – and has been for many years – a team sport." that topic, the authors acknowledge that "it is often very difficult to establish scientific precedence," and they note that frequently, "when investigators were trying to solve the same problems but communication was less easy than now and publications were less acces-

sible...they worked independently." I believe that the same points pertain to the introduction and evolution of sonography. With that proviso, I believe it appropriate to mention two people who, while not called "sonographers" at the start of their careers, appear to have been very early entrants into the field.

The first is Charles L. Haine, who was hired in the mid-1960s by Dr. Harvey Feigenbaum at the recommendation of his secretary. As a young man, Mr. Haine was not a very good student. He was a high school dropout who joined the U.S. Navy, where he earned the equivalent of a high school

diploma. He flunked out of college and had trouble holding a job. He was hired "out of desperation," and at the recommendation of Dr. Feigenbaum's secretary (who later became Mrs. Haine). Dr. Feigenbaum was eager to investigate practical applications of cardiac ultrasound, but he was the director of the Cardiac Cath Lab at Indiana University and did not have the time to perform A-mode and M-mode scans himself. Apparently, Mr. Haine was not only enthusiastic, but also learned quickly how to examine the heart using reflected ultrasound, and he became an important member of Dr. Feigenbaum's research team. Eventually Mr. Haine did go back to school and became a very successful academic optometrist. In 2011, he retired as Associate Dean of Clinical Affairs at Western University of Health Sciences College of Optometry in Pomona, California.

Another of the first "sonographers" to work in the United States was Joan P. Baker MSR, RDMS, RDCS, FSDMS. At the age of 23, she left her native England to do ultrasound exams with a neuroradiologist at the Stanford Medical Center. I first

met Joan in 1977, when her husband Donald W. Baker, a professor in the University of Washington's (UW) Center for Bioengineering, recruited me to join the UW faculty. I'm indebted to her for providing a considerable amount of background material that I've adapted in preparing this article. Ms. Baker reminded me that as a teenager in the British midlands, she had dreams of attending medical school but had difficulties in passing the foreign language requirement needed at the time to gain admission to a school of medicine. She was good in sciences and decided to pursue a career in radiology, which required good science grades but had no foreign language requirement. She went to London as a teenager, and eventually took a position at The National Hospital for Nervous Diseases. There, she was introduced to ultrasound and nuclear medicine, largely - she recalls - because she was the youngest radiographer with the least experience, and nobody else was interested in those fields. At the time, ultrasound was chiefly used for brain scanning.

In late 1964, Ms. Baker's boss returned from a medical meeting where he met an American neuroradiologist from Stanford who invited Ms. Baker to come to the United States (U.S.) to work "for a year." In early 1965, she arrived at Stanford, and she has lived in the U.S. ever since! She recalls that when she arrived, the neuroradiologist for whom she worked initially proclaimed – proudly – that he had "found the on/off switch." One Mon-

Mr. Haine was not only enthusiastic, but also learned quickly how to examine the heart using reflected ultrasound, and he became an important member of Dr. Feigenbaum's research team.

day morning a young physician from the cardiology department came to the radiology department holding Dr. Feigenbaum's 1965 article "Ultrasound Diagnosis of Pericardial Effusion."<sup>5</sup> The physician mentioned that they had a patient in the hospital with a pericardial effusion and wondered if Ms. Baker could detect the effusion using her ultrasound equipment. She was able to do so.

However, the earliest clinical applications of ultrasound may have been in the field of "Physiatry," now known as "Physical Medicine and Rehabilitation." Ultrasound was used as therapy for muscle inju-

ries – indeed, I remember receiving ultrasound therapy for a muscular injury I suffered as a collegiate athlete in the early 1960s. The initial applications of cardiovascular ultrasound for diagnosis, rather than therapy, probably occurred in Europe and Japan in the 1950s. We

should also recall that ultrasound technology has been of considerable and longstanding importance in the field of obstetrics. Dr. Ian Donald of Glasgow apparently used ultrasound as a diagnostic tool in his obstetrics and gynecology practice as early as 1955.

The evolution of clinical ultrasound was accompanied by the introduction and evolution of professional organizations formed to represent the interests of the practitioners and applications of clinical ultrasound. In 1952, a group of physiatrists formed the American Institute of Ultrasonics in Medicine (AIUM); in 1968, that organization retained the acronym AIUM but changed its name to the American Institute of Ultrasound in Medicine. In 1964, AIUM leaders modified the focus of the AIUM to include colleagues who used ultrasound for both diagnostic and therapeutic purposes. At AIUM's 1969 meeting, a small group of non-physician "technical specialists" advocated for a technical society to represent the interests of non-physicians and non-physicists who were involved in performing ultrasound studies in various clinical settings. This resulted in the formation, in 1969, of the American Society of Ultrasound Technical Specialists (ASUTS). The name "technical specialist" was apparently used in the draft ASUTS Constitution and selected in lieu of "technologist" or "technician," which were controversial terms in the field of radiology.

She recalls that when she arrived, the neuroradiologist for whom she worked initially proclaimed – proudly – that he had "found the on/off switch." Since non-physician "technical specialists" who worked in the field of radiology were termed "radiologic technologists," or "radiographers," the term "sonographer" eventually won support. In 1980, the ASUTS changed its name to the Society of Diagnostic Medical Sonographers

(SDMS) and won formal recognition by the American Medical Association.

The different professional organizations that have represented "sonographers" in various clinical disciplines deserve some additional discussion. One of the important tasks for these professional organizations was the development of appropriate training programs and professional standards. These issues also will be addressed in a future article in this series.

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# **JASE Call for Papers:**

Focus Issue on Echocardiography in Valvular Heart Disease

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The Journal of the American Society of Echocardiography (JASE) is pleased to announce a Call for Papers for a Focus Issue on Echocardiography in Valvular Heart Disease for publication in early 2023.

We invite submission of original research studies, reviews, and brief research communications that address any aspect of echocardiography in valvular heart disease, including:

- Validation of new and evolving technologies including point of care cardiac ultrasound, strain and 3D imaging, and artificial intelligence
- Application of echocardiography to enhance understanding of valvular heart disease, time intervention, and improve patient outcome

In line with our core values at JASE, we welcome multi-disciplinary collaborations (e.g., sonographers, nurses, physicians, scientists).

Submissions are due in Editorial Manager by October 19 (https://www.editorialmanager. com/jasecho/default1.aspx). Please note in your cover letter that the submission is for the Focus Issue on Echocardiography in Valvular Heart Disease.



#### IN THIS ISSUE

Original Investigations Arrhythmic Risk as a Function of Timing of UVEF Assessment in Nonschemic Dilated Cardiomypathy Markers of Adverse Outcome in Moderate Aortic Stenosis Outcome as a Function of Tricuspid Regurgitation Severity Intracardiac Flow and LV Aneurysm Formation in Hypertrophic Cardiomypathy Takotsubo Syndrome and EV010-19 Infection Association of LA Volume and Function with Outcome in Patients with Atrial Fibrillation Undergoing Ablation LV Strain in Pediatric Myocarditis

Machine Learning to Enhance Diastolic Function Assessment in Children





#### **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.