ASE’s Council on Circulation & Vascular Ultrasound has put together a program that will provide attendees with an excellent overview, as well as advanced topics on vascular ultrasound of interest to the practicing cardiologist/sonographer.

**EARLY CAREER (EC)**
This track has been designed specifically for fellows in training, and early career physicians and sonographers. The focus will be career development with sessions geared toward helping you effectively navigate the formative years of practice while maximizing the skills you have obtained during your training.

**IMAGING ESSENTIALS (E)**
ASE’s Council on Cardiovascular Sonography has created this track to instruct practitioners on techniques of assessment and quantitation. There are disease-based sessions that will help you improve your skills in imaging, measurements and quantification in a variety of disease states. In addition, there are practical sessions on lab management, diastology, myocardial perfusion, strain, and 3D echo that you can incorporate into your lab when you return home.

**INNOVATION/TECHNOLOGY (IT)**
The Innovation/Technology Track has been designed to communicate recent advances that improve quality. Topics include clinically-relevant innovations that improve diagnostic accuracy, quantification, and workflow; and breakthrough cutting-edge technologies that will be used for treating the patients of tomorrow.

**ISCHEMIA (I)**
The Ischemia Track covers a diverse spectrum inclusive of obstructive and non-obstructive coronary diseases and stress echocardiography. Pericardial sessions have also been included. Sessions will address physiology, pathophysiology, diagnosis, and clinical management using echocardiography and multimodality imaging.

**MYOCARDIUM/FUNCTION (M)**
The Myocardium/Function Track addresses the core and advanced competencies of pathologies involving the myocardium and provides an update about standards of care. Included in this track are sessions on cardio-oncology and non-ischemic cardiomyopathies.

**PEDIATRIC/CONGENITAL (PC)**
ASE’s Council on Pediatric and Congenital Heart Disease has created a program packed with cutting-edge science from fetus to adult that brings together cardiologists, PhDs, engineers, and sonographers with the unifying goal of improving care for those with heart disease. The program will take you on a journey of using echo to predict, diagnose, and treat heart disease by reviewing current standards, learning from experts, and exposing you to what is on the horizon.

**PERIOPERATIVE (P)**
The Perioperative Track, designed by ASE’s Council on Perioperative Echocardiography, brings together cardiac anesthesiologists, sonographers, cardiologists, and surgeons with the goal of sharing knowledge in cardiovascular care and perioperative/periprocedural echocardiography.

**POINT OF CARE (POC)**
The Point of Care track focuses on this highly valuable modality that is of critical importance as healthcare practitioners become skilled in the use of point of care ultrasound.

**SPECIAL SESSIONS (S)**
The 2020 Program Committee has designed the Special Sessions Track to introduce different learning formats to entertain and educate. Join us for the Episodes of Care, Echo and COVID, the Value Summit, and more.

**VALVES (V)**
The Valve Track has been planned with the goal of bringing together the expertise of sonographers, cardiologists, cardiac anesthesiologists, and surgeons to share knowledge in the diagnosis and management of patients with both simple and complex valvular heart disease. The sessions will highlight the role of the newer echocardiography modalities in managing patients with valvular diseases, present and future of percutaneous aortic, mitral, and tricuspid valve therapies, and an overview of structural imaging to complement the perioperative track.

**Chalk Talks**
Have clinical questions? Chalk Talks offer an opportunity to get answers to all your questions from experts in the field of cardiovascular ultrasound.

Sessions are identified with the following shapes to assist you in locating education aimed at your level of training.

- Basic
- Basic/Intermediate
- Intermediate
- Advanced
- Basic/Intermediate/Advanced

#ASE2020
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education through the joint providorship of the American Society of Echocardiography and the ASE Foundation.

ASE is accredited by the ACCME to provide continuing medical education for physicians. ASE is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. ASE designates the live activity for a maximum of 44 AMA PRA Category 1 Credits™. Attendees should claim only the credit commensurate with the extent of their participation in the activity. There is no CME awarded for the poster sessions at this time.

Successful completion of this CME activity enables the participant to earn up to 44 MOC points in the American Board of Internal Medicine’s (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the ASE’s responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

Successful completion of this CME activity, which includes participation in the activity, with individual assessments of the participant and feedback to the participant, enables the participant to earn up to 10 MOC points in the American Board of Pediatrics’ (ABP) Maintenance of Certification (MOC) program. It is ASE’s responsibility to submit participant completion information to ACCME for the purpose of granting ABP MOC credit.

The ACCME and the European Board of Accreditation in Cardiology (EBAC) recognize each other’s accreditation systems as substantially equivalent. To obtain EBAC credit for participation in this activity, submit evidence of participation directly to EBAC (ebac-cme.org).

The European Union of Medical Specialists (UEMS)-European Accreditation Council for Continuing Medical Education (EACME) has an agreement of mutual recognition of continuing medical education (CME) credit with the American Medical Association (AMA). European physicians interested in converting AMA PRA Category 1 Credit™ into European CME credit (ECMEC) should contact the UEMS (uems.eu).

The National Board of Echocardiography™ (NBE) requires 15 hours of echocardiography specific CME for both ReASCE® and RePTE™ recertification. This activity contains 44 AMA PRA Category 1 Credits™ that can be used toward recertification requirements.

ARDMS and CCI recognize ASE’s certificates and have agreed to honor the credit hours toward their registry requirements for sonographers.

All or a portion of this educational activity may meet the CME requirement for IAC Echocardiography accreditation.

This activity is eligible for Section 1 credits in the Royal College of Physicians and Surgeons of Canada’s Maintenance of Certification (MOC) Program. Participants must log into MAINPORT to claim this activity.

DISCLAIMER

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

COMMERCIAL SUPPORT DISCLOSURE

Educational Grants

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

In-Kind Donations

This activity is not supported by in-kind donations.

DISCLOSURES

The American Society of Echocardiography is committed to ensuring that its educational mission and all educational programs are not influenced by the special interests of any corporation or individual, and its mandate is to retain only those speakers whose financial interests can be effectively resolved to maintain the goals and educational integrity of the program. While a monetary or professional affiliation with a corporation does not necessarily influence a speaker’s presentation, the policies of the ACCME require that any relationships that could possibly conflict with the educational value of the program be resolved prior to the educational session and disclosed to the audience. In accordance with these policies, ASE implemented mechanisms during the planning and implementation of this CME activity to identify and resolve conflicts of interest for all individuals in a position to control content.

The American Society of Echocardiography and the ASE Foundation.

It is the policy of ASE to ensure balance, independence, objectivity, and scientific rigor in all of its educational activities. All speakers at the Virtual Scientific Sessions have agreed to the following:

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

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

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

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

#ASE2020
ASE 2020 FACULTY DISCLOSURE INFORMATION

RELATIONSHIP CODES

1. Speaker/Speaker’s Bureau
2. Consultant, Advisor
3. Stock Ownership (Not Including Stocks Owned by A Managed Portfolio)
4. Research Grant Support (Including Grants in Which Speaker Is Listed as PI)
5. Employment Affiliation/Spouse Employment Affiliation
6. Royalty, Patents
7. Corporate Research Collaboration (Including Trials/Product Testing)
8. Other (Educator or Honoria)
9. Member Data Safety and Monitoring Board

Adams, D. ...............ESP Ultrasound Registry Review (1); Caption Health (2), (3)
Altman, C. ..................UpToDate (6)
Aurigemma, G. ...............TomTec (1)
Badano, L. ...............GE Healthcare (1); Philips (1); Instituto Auxologico Italiano (2)
Borden, M. ..................RespiroInc (3)
Bruckheimer, E. ...............RealView Imaging (3)
Davis, A. .......................Lantheus Medical Imaging (1); Caption Health (2)
Demaria, A. ...............DIA (4); Hitachi (4); Ultromics (4)
Fanola, C. .......................Inari Medica (2); Janssen/Johnson & Johnson (2)
Feigenbaum, H. ...............KeyLabs (5)
Fowlkes, B. ...............Philips Healthcare (7)
Hahn, R. ...............Abbott Structural (1); Edwards Lifescience (1); Medtronic (1)
Han, Y. ...............Bracco (2); GE (1); Gilead (4); Pfizer (4)
Hanna, M. ...............Akcea (2); Alnylam (2); Pfizer (2)
Hung, J. ...............Harpoon Medical Inc. (2); Core Lab (2)
Iriart, X. ...............Abbott (1); Medtronic (2); Philips (1)
Jankowski, M. ..................Caption Health (2)
Kim, E. .......................Acer Therapeutics (2)
Kizer, J. Bristol Myers Squibb (3); Johnson & Johnson (3); Medtronic (3); Merck (3); Pfizer (3)
Kutty, S. .......................GE (2); ZS Associates (2)
Leong-Poi, H. ...............Lantheus Medical Imaging (1)
Linder, J. .......................Lantheus Medical Imaging (4); GE Lifesciences (4)
Mahadevan, V .......................GE Healthcare (4); Medtronic (4)
Mitchell, C. ...............Davies Publishing Inc (8); W.L. Gore & Associates (4) Wolters-Kluwer/Elsevier (6), (8)
Monaghan, M. ...............Tech (2); Neovasc (2); Philips (1)
Nyman, C. .......................Edwards Lifesciences (1), (3)
Palma, R. .......................Lantheus Medical Imaging (1); Philips Medical Imaging (1)
Pandey, A. .......................Roche Diagnostics (2), (8)
Pandian, N ...............Lantheus (1); Canon (2); Siemens (2)
Parks, M.M .......................Lantheus (1)
Parthiban, A. .......................Edwards Lifesciences (4)
Patel, A. .......................Alnylam (1); Philips Healthcare (4); General Electric (4)
Patil, P. .......................Edwards Lifesciences (1)
Pellikka, P. .........GE Healthcare (4); Lantheus (4); NHLBI (4)
Porter, T. ...............Lantheus (2); Northwest Imaging Forums (1); Philips (8)
Pruetz, J. .......................Prolacta Science (2)
Quaife, R. .......................Philips (4)
Qasim, A. .......................Abbott Vascular (4); Biotelemetry (2); Medtronic (4)
Rudski, L. .......................General Electric (3)
Rychick, J. .......................NUVO Inc. (2)
Senior, R. ...............Bracco (1); Lantheus Medical Imaging (1); Philips Healthcare (1)
Salcedo, E. .......................Philips Medical (2)
Schiller, N. .......................GE Health Care (4); Echonous (2); Cardiocore (2)
Sengupta, P. .......................Heart Sciences (2); Kencor Health (2); Ultromics (2)
Sherman, S. .......................Philips Health (8); e-echocardiography.com (8)
Shook, D. .......................Baylis Medical (8); Boston Scientific (8); Edwards Lifesciences (2), (8)
Sugeng, L. ...............Canon (4); Philips (7); Seimens (1)
Thavendiranathan, P ...............Amgen (1)
Tison, G. ...............Janssen Pharm (4); MyoKardia (4)
Weissman, N .......................Baylabs (2); Edwards (4); Boston Scientific (4); Abbott (4); GE Healthcare (4); Medtronic (4)
Yoler, L. ...............Playground Global (8); Zoox (2)
Yu, A. .......................Genentech (2)

NO DISCLOSURES

Abraham, T; Ahmad, M; Aly, Doaa; Aragam, J; Amaatu, R; Aronson, L; Ayres, N; Balasubramanian, S; Barsal, M; Barker, P; Betz, J; Blankstein, R; Blauweyt, L; Bogerman, M; Blum, M; Bogerman, M; Bremer, M; Broberg, C; Buddle, S; Byrd, B; Camarda, J; Carroll, J; Cassidy, C; Cauduro, S; Chetrit, M; Chew, J; Cohen, M; Collins, K; Cosyns, B; Cuneo, B; Dal-Bianco, J; Dimaria, M; Donal, E; Donofrio, M; Dorfman, A; Drake, D; Edvardsen, T; Eiderm, B; El-Assaad, I; Farmer, C; Farooki, K; Ferrari, V; Fleishman, C; Frampton, A; Freud, L; Friedberg, M; Frommelt, P; Galtonde, M; Garcia, M; Gardin, J; Gelzins, T; Gill, E; Grimm, R; Harrington, C; Harris, I; Hays, A; Henry, T; Hirata, K; Igata, S; Ignatowski, D; Izumi, C; Jane, P; Kapur, N; Kaspar, K; Kato, N; Khandheria, B; Khanna, A; Khoo, N; Kim, K; Kirkpatrick, J; Kolias, T; Kort, S; Kramer, C; Krzonon, I; Kumaresam, A; Kwan, I; Landeck, B; Lanspa, M; Leefeb, B; LeLeiko, R; Lewin, M; Little, S; Loncaric, F; Lopez, L; Lu, J; Mackensen, G; Main, M; Mardy, C; Marshall, J; Marx, G; Maslow, A; Mathias, W; Mayer, S; Mertens, L; Michelfelder, R; Moon-Grady, A; Moore, R; Morhy, S; Morris, S; Mukherjee, C; Mulvag, S; Nagueh, S; Nanda, N; Nguyen, H; Nguyen, T; Nicora, A; Nikravan, S; Nikomo, V; O’Leary, P; Ortoleva, J; Pai Cole, S; Pampaloni, M; Panebianco, N; Park, L; Parra, D; Peyvandi, F; Pham, V; Phealon, D; Phillips, S; Pickard, M; Pickard, S; Plan, J; Powell, A; Prado, A; Pushparaj, K; Qian, L; Quartermain, M; Radhakrishnan, A; Rahko, P; Raza, S; Reisman, R; Rigolin, V; Roer, S; Rose, G; Rosen, D; Rowe, J; Rutherford, G; Sachdeva, R; Sanborn, D; Scherrer-Crosbie, M; Scott, N; Sengupta, S; Shahul, S; Shamoun, F; Shea, E; Shirali, G; Silverton, N; Silvestry, F; Simpson, J; Slesnick, T; Smiseth, O; Spina, S; Srivastava, S; Stainback, R; Stern, K; Subramaniam, K; Swaminathan, M; Taub, C; Taylor, C; Thaman, R; Tolstrup, K; Tsai, A; Tsutsui, J; Tweet, M; Umland, M; Villanueva, F; Versanger, M; Warrainach, H; Wasserman, M; Wei, K; Wells, B; Weyman, A; Weigers, S; Wong, J; Wood, M; Yamamoto, K; Yamat, M; Young, L; Zhang, L; Zoghbi, W.
## SCHEDULE AT A GLANCE

### SATURDAY, AUGUST 8  10:30 AM – 7:30 PM ET

<table>
<thead>
<tr>
<th>Time</th>
<th>Channel</th>
<th>Program</th>
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</thead>
<tbody>
<tr>
<td>10:30 – 11:00 AM ET</td>
<td>CHANNEL DISCOVERY</td>
<td>Future of Echo</td>
</tr>
<tr>
<td>11:00 AM – 12:30 PM ET</td>
<td>CHANNEL EXPLORER</td>
<td>Progress in Science and Technology</td>
</tr>
<tr>
<td>12:30 – 1:30 PM ET</td>
<td>CHANNEL GUIDEPOINT</td>
<td>Guidelines and Best Practice</td>
</tr>
<tr>
<td>1:30 – 2:30 PM ET</td>
<td>CHANNEL INSIGHT</td>
<td>Pediatrics</td>
</tr>
<tr>
<td>2:30 – 3:00 PM ET</td>
<td>VISIT EXHIBIT HALL</td>
<td>Chalk Talks Doppler (1:30 – 2:00 PM) &amp; Echo in Pulmonary Hypertension (2:00 – 2:30 PM)</td>
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<tr>
<td>3:00 – 4:00 PM ET</td>
<td>VISIT EXHIBIT HALL</td>
<td>Simulated Heart Valve Team Cases Discussion - Mitral</td>
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<tr>
<td>4:00 – 5:00 PM ET</td>
<td>VISIT EXHIBIT HALL</td>
<td>Renaissance in Cardiac Imaging to Assist Cardiac Interventions (ASE/EACVI Joint Session)</td>
</tr>
<tr>
<td>5:00 – 5:30 PM ET</td>
<td>VISIT EXHIBIT HALL</td>
<td>Episode of Care 1: Coronary Disease (4:00 – 5:30 PM)</td>
</tr>
<tr>
<td>5:30 – 6:30 PM ET</td>
<td>VISIT EXHIBIT HALL</td>
<td>Active Echocardiography: Advances in Ultrasound Therapeutics</td>
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<td></td>
<td>CHANNEL DISCOVERY</td>
<td>Educator Summit: Contrast and Competency</td>
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<td>CHANNEL EXPLORER</td>
<td>Quality and Value Summit</td>
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<tr>
<td></td>
<td>CHANNEL GUIDEPOINT</td>
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<td>VISIT EXHIBIT HALL</td>
<td>Quality and Value Summit</td>
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<tr>
<td></td>
<td>ASE HAPPY HOUR AND COUNCIL NETWORKING</td>
<td>Virtual Social Gathering</td>
</tr>
</tbody>
</table>

**Categorization:**
- **Basic**
- **Basic/Intermediate**
- **Intermediate**
- **Intermediate/Advanced**
- **Advanced**
- **Basic/Intermediate/Advanced**

**Sessions:**
- State of ASE Madhav Swaminathan, MD, FASE
- AI and What it Means to You Laurie Yoler
- Stronger Together and On the Horizon
- Chalk Talks Doppler (1:30 – 2:00 PM) & Echo in Pulmonary Hypertension (2:00 – 2:30 PM)
- Simulated Heart Valve Team Cases Discussion - Mitral
- Renaissance in Cardiac Imaging to Assist Cardiac Interventions (ASE/EACVI Joint Session)
- Episode of Care 1: Coronary Disease (4:00 – 5:30 PM)
- Active Echocardiography: Advances in Ultrasound Therapeutics
- Educator Summit: Contrast and Competency
- Quality and Value Summit

**Themes:**
- Circulation (C)
- Early Career (EC)
- Imaging Essentials (E)
- Innovation/Technology (IT)
- Ischemia (I)
- Myocardium/Function (M)
- Pediatric/Congenital (PC)
- Perioperative (P)
- Point of Care (POC)
- Special Sessions (S)
- Valves (V)
CHANNEL DISCOVERY
10:30 AM - 11:00 AM
🌟 State of ASE and Incoming President’s Address
Chair: M. Swaminathan
10:30 AM - 10:40 AM
State of ASE
M. Swaminathan
10:40 AM - 10:50 AM
Board of Directors Induction and Announcements
M. Swaminathan
10:50 AM - 11:00 AM
Incoming President’s Address
J. Hung

CHANNEL DISCOVERY
11:00 AM – 12:30 PM
 הציבור Artificial Intelligence and What It Means to You
Chairs: T. Abraham; S. Phillip
Twitter Moderators: E. Michos (@ErinMichos); A. Narang (@AkhilNarangMD); J. Strom (@DocStrom); R. Thamman (@amritu)
11:00 AM - 11:03 AM
Welcome and Introduction
T. Abraham
11:03 AM - 11:04 AM
Introduction of Laurie Yoler
T. Abraham
11:04 AM - 11:19 AM
Gardin Lecture: My Life on Artificial Intelligence - How Technology Will Change the Way We Live
L. Yoler
11:19 AM - 11:34 AM
Where the Puck is Going: Why Interest and Investment Are All in Artificial Intelligence?
C. Farmer
11:34 AM - 11:49 AM
Artificial Intelligence in Medicine: Promises, Potential, Pain and Pitfalls
M. Blum
11:49 AM - 11:54 AM
Panel Discussion
11:54 AM - 12:04 PM
How Artificial Intelligence Can Save Echocardiography
G. Tison
12:04 PM - 12:14 PM
Fundamental Artificial Intelligence for the Echocardiographer/ Sonographer
R. Arnaout
12:14 PM - 12:24 PM
A Sonographer Perspective on Artificial Intelligence
D. Adams
12:24 PM – 12:30 PM
Fireside Chat: Master Clinicians vs. Mega Computers - Who Wins?
M. Bogerman

CHANNEL INSIGHT
11:00 AM – 11:30 AM
Public Stronger Together
Chair: R. Sachdeva
Twitter Moderators: K. Farooqi (@Kfarooqi); S. Kutty (@ShelbyKuttyMD); P. Shivaram (@PushpaShivaram); M. Wasserman (@MelisWasserman)
11:00 AM - 11:06 AM
Welcome and Opening Remarks
R. Sachdeva
11:06 AM - 11:16 AM
Council Chair’s address
P. Barker
11:16 AM - 11:23 AM
COVID Pandemic: Recommendations for Pediatric Echocardiography
C. Altman
11:23 AM - 11:30 AM
COVID Pandemic: Sonographer Perspective
M. Wasserman

CHANNEL INSIGHT
11:30 AM – 12:30 PM
Public On the Horizon
Chair: R. Sachdeva
Twitter Moderators: K. Farooqi (@Kfarooqi); S. Kutty (@ShelbyKuttyMD); P. Shivaram (@PushpaShivaram); M. Wasserman (@MelisWasserman)
11:30 AM - 11:40 AM
The Latest and Greatest in Pediatric Cardiac Imaging: Year in Review
L. Mertens
11:40 AM - 11:50 AM
Future of Pediatric Echo Research
S. Morris
11:50 AM - 12:00 PM  
Fetal Cardiac Imaging and Therapeutics: Where Should We Be in 2030?  
J. Rychick

12:00 PM - 12:10 PM  
Echo-Nomics of Pediatric Cardiac Care: What Does the Future Hold for Us?  
G. Shirali

12:10 PM - 12:15 PM  
Right Ventricular Remodeling after Cone Reconstruction for Ebstein Anomaly: Natural History, Interventricular Interactions, and Early Observations after Bone Marrow Derived Stem Cell Therapy  
P. O’Leary

12:15 PM - 12:30 PM  
Question & Answer

CHANNEL DISCOVERY  
1:30 PM - 2:00 PM  
Chalk Talk  
Doppler  
N. Pandian

CHANNEL DISCOVERY  
2:00 PM - 2:30 PM  
Chalk Talk  
Echo in Pulmonary Hypertension  
N. Schiller

CHANNEL EXPLORER  
1:30 PM - 2:30 PM  
50 Shades of Grey (Scale) in Peri-Procedural Imaging  
Chair: S. Pai Cole  
Twitter Moderators: M. Fischer (@MattFischerMD); A. Nicoara (@nicoa002); M. Swaminathan (@mswami001)

1:30 PM - 1:45 PM  
Complex Mitral Assessment (Under Anesthesia)  
S. Sherman

1:45 PM - 2:00 PM  
What Do Procedural Gradients Actually Tell Us?  
C. Mukherjee

2:00 PM - 2:15 PM  
Diastology in the Peri-Procedural Setting  
T. Gelzinis

2:15 PM - 2:30 PM  
Question & Answer

CHANNEL GUIDEPOINT  
1:30 PM - 2:30 PM  
Simulated Heart Valve Team Cases Discussion - Mitral  
Chairs: R. Hahn; N. Nanda  
Panelists: S. Little; G. Mackensen; R. Quaife  
Twitter Moderators: N. Faza (@NadeenFaza); E. Gill (@edwardagill); R. Hahn (@hahn_rt); R. Jain (@renujain19); S. Little (@SLittleMD)

1:30 PM - 1:50 PM  
Primary Mitral Regurgitation Clip  
J. Dal-Bianco

1:50 PM - 2:10 PM  
Functional Mitral Regurgitation Clip  
A. Qasim

2:10 PM - 2:30 PM  
Valve in MAC, Valve in Native Valve, Valve in Ring, or Percutaneous New Mitral Valve  
E. Gill

CHANNEL INSIGHT  
1:30 PM - 2:30 PM  
Renaissance in Cardiac Imaging to Assist Cardiac Interventions  
(ASE / EACVI Joint Session)  
Chair: M. Friedberg  
Twitter Moderators: K. Farooqi (@Kfaroogi); S. Kutty (@ShelbyKuttyMD); P. Shivaram (@PushpaShivaram)

1:30 PM - 1:40 PM  
3D TEE  
X. Iriart

1:40 PM - 1:50 PM  
Fusion Imaging  
P. Jone

1:50 PM - 2:00 PM  
3D Printing  
K. Farooqi

2:00 PM - 2:10 PM  
Medical Holography  
E. Bruckheimer

2:10 PM - 2:20 PM  
Virtual Reality  
R. Moore

2:20 PM - 2:30 PM  
Question & Answer
**CHANNEL DISCOVERY**
4:00 PM - 5:30 PM

**Episode of Care 1: Coronary Disease**
Chairs: C. Abouzeid; K. Tolstrup
Twitter Moderators: D. Ignatowski (@DeniseIgnatows1); J. Lopez-Mattei (@onco_cardiology); E. Michos (@ErinMichos); A. Narang (@AkhiNarangMD); P. Parwani (@purvipoarwani); S. Raza (@SamRRazaMD); J. Strom (@DocStrom); R. Thamman (@iamrithu)

**POCUS**
S. Raza

**CT**
M. Garcia

**Nuclear**
M. Pampaloni

**Echo Sonographer**
D. Ignatowski

**Echocardiographer**
V. Rigolin

Question & Answer

**CHANNEL EXPLORER**
4:00 PM - 5:00 PM

**Active Echocardiography: Advances in Ultrasound Therapeutics**
Chair: J. Lindner
Twitter Moderators: E. Garcia-Sayan (@EGarciaSayan); A. Johri (@amerjohri); S. Mulvagh (@HeartDocSharon)

4:00 PM - 4:02 PM
Introduction of Kalmanson Lecture
J. Lindner

4:02 PM - 4:12 PM
Kalmanson Lecture: Therapeutic Methods for Cardiovascular Tissue Ablation
B. Fowlkes

4:12 PM - 4:22 PM
Gene/Drug Delivery
M. Borden

4:22 PM - 4:32 PM
Augmented Thrombolysis
W. Mathias

4:32 PM - 4:42 PM
Modulation of Tissue Perfusion
J. Lindner

**CHANNEL GUIDEPOINT**
4:00 PM - 5:00 PM

**Educator Summit: Contrast and Competency**
Chairs: M. Bremer; C. Mitchell
Twitter Moderators: K. Kasir (@KasirKelly); C. Mitchell (@carolKCM)

4:00 PM - 4:10 PM
Introduction and Overview of Session, Legal, and Policy Considerations
M. Bremer

4:10 PM - 4:20 PM
Methods of Testing Competency
R. Palma

4:20 PM - 4:45 PM
Practical Competency for Educators
J. Betz

4:45 PM - 4:55 PM
Sonographer Perspectives
C. Mitchell

4:55 PM - 5:00 PM
Question & Answer

**CHANNEL INSIGHT**
4:00 PM - 5:00 PM

**Quality and Value Summit**
Chair: C. Fleishman
Twitter Moderators: S. Kutty (@ShelbyKuttyMD); P. Shivaram (@PushpaShivaram); M. Wasserman (@MelisWasserman)

4:00 PM - 4:05 PM
Echo Complexity Score: How Can It Impact Quality and Efficiency of a Lab?
S. Balasubramanian

4:05 PM - 4:10 PM
Practice Variation in Pediatric Echo Labs
J. Camarda

4:10 PM - 4:20 PM
Multimodality Imaging in A Value-Based Healthcare System
K. Stern
4:20 PM - 4:30 PM
Debate: Quality Metrics-Adds Value to Patient Care and We Need More!
L. Lopez

4:30 PM - 4:40 PM
Debate: Quality Metrics-We Have Enough Already, Not Sure What to Do with Them!
M. Lewin

4:40 PM - 4:45 PM
The American Society of Echocardiography Committee on Pediatric Echocardiography Laboratory Productivity Survey 4: Pediatric Echocardiography Labs Maintain Productivity While Increasing Study Volume and Incorporating New Technologies B. Printz

4:45 PM - 5:00 PM
Question & Answer

ASE HAPPY HOUR AND COUNCIL NETWORKING
5:30 PM - 6:00 PM

CHANNEL DISCOVERY
Welcome and Toast to Healthcare Workers
Madhav Swaminathan, MD, FASE

Karaoke Contest and Voting
Theodore Abraham, MD, FASE
Sue Phillip, RCS, FASE

Council Networking Kick-off
Judy Hung, MD, FASE

COUNCIL NETWORKING EVENTS
6:00 PM - 6:30 PM

CHANNEL DISCOVERY
Council on Perioperative Echocardiography
Alina Nicoara, MD, FASE

CHANNEL EXPLORER
Council on Circulation & Vascular Ultrasound
Bryan Wells, MD, FASE
Rebecca LeLeiko, MD

CHANNEL INSIGHT
Council on Pediatric and Congenital Heart Disease
Carolyn Altman, MD, FASE
Piers Barker, MD, FASE

CHANNEL GUIDEPOINT
Council on Cardiovascular Sonography
Keith Collins, MS, RDCS, FASE
Carol Mitchell, PhD, RDMS, RDCS, RVT, RT(R), ACS, FASE
### SUNDAY, AUGUST 9  11:00 AM – 8:00 PM ET

<table>
<thead>
<tr>
<th>Time</th>
<th>Channel/Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 – 11:25 AM ET</td>
<td>Exhibit Hall Open</td>
</tr>
<tr>
<td>11:25 AM – 12:30 PM ET</td>
<td>Channel Discovery: Future of Echo</td>
</tr>
<tr>
<td>12:30 – 1:30 PM ET</td>
<td>Channel Explorer: Progress in Science and Technology</td>
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<tr>
<td>1:30 – 2:30 PM ET</td>
<td>Channel Guidepoint: Guidelines and Best Practice</td>
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<tr>
<td>2:30 – 3:00 PM ET</td>
<td>Channel Insight: Pediatrics</td>
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<tr>
<td>3:00 – 4:00 PM ET</td>
<td>CIRCULATION (C)</td>
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<tr>
<td>4:00 – 5:00 PM ET</td>
<td>IMAGING ESSENTIALS (E)</td>
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<tr>
<td>5:00 – 5:30 PM ET</td>
<td>ISCHEMIA (I)</td>
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<tr>
<td>5:30 – 6:30 PM ET</td>
<td>PEDIATRIC/CONGENITAL (PC)</td>
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<tr>
<td>6:30 – 7:30 PM ET</td>
<td>PERIOPERATIVE (P)</td>
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<tr>
<td>7:30 PM – 8:00 PM ET</td>
<td>POINT OF CARE (POC)</td>
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#### CHALLENGES/CONNECT

- **CIRCULATION (C)**
- **IMAGING ESSENTIALS (E)**
- **ISCHEMIA (I)**
- **PEDIATRIC/CONGENITAL (PC)**
- **PERIOPERATIVE (P)**
- **POINT OF CARE (POC)**
- **VALVES (V)**

### Agenda

**EXHIBIT HALL OPEN**

**11:00 – 11:25 AM ET**
- **31st Annual Edler Lecture**: The Role of Imaging Today for Developing Drugs of Tomorrow Jonathan Lindner, MD, FASE

**11:25 AM – 12:30 PM ET**
- **Echo and COVID**
  - Episode of Care 2: Mitral Valve Disease (1:00 – 2:30 PM)
  
**12:30 – 1:30 PM ET**
- **Echo and COVID**
  - Arthur E. Weyman Via Competition and 21st Annual Feigenbaum Lecture Shelby Koop, MD, PhD, MHCM, FASE (1:30 – 3:00 PM)

**1:30 – 2:30 PM ET**
- **Echo and COVID**
  - Cardio-Oncology in the Real World (ASE/EACVI Joint Session)

**2:30 – 3:00 PM ET**
- **Visit Exhibit Hall**
  - **Science & Technology Theater: Bracco Diagnostics**
    - Chalk Talks: Contemporary Evaluation of Valve Disease (4:00 – 4:30 PM) & Fundamentals and Applications of Strain (4:30 – 5:00 PM)
  
**3:00 – 4:00 PM ET**
- **Visit Exhibit Hall**
  - **Episode of Care 3: MCS – Transplant** (5:00 – 6:30 PM)

**4:00 – 5:00 PM ET**
- **Visit Exhibit Hall**
  - **Science & Technology Theater: Bracco Diagnostics**
    - Echo Technology at the Cutting Edge of Knowledge: Kerber Lecture Julius Gardin, MD, FASE
  
**5:00 – 5:30 PM ET**
- **Visit Exhibit Hall**
  - **Episode of Care 3: MCS – Transplant** (5:00 – 6:30 PM)

**5:30 – 6:30 PM ET**
- **Visit Exhibit Hall**
  - **Science & Technology Theater: Bracco Diagnostics**
    - Echo in Acute Myocardial Infarction: From Diagnosis to Therapy
    - Imaging Solutions to Clinical Conundrums in Congenital Heart Disease

**6:30 – 7:30 PM ET**
- **Visit Exhibit Hall**
  - **Science & Technology Theater: Bracco Diagnostics**
    - HfPEF: Everything You Need to Know and More
    - Multimodality Imaging from Fetus to Young Adults

### Additional Sessions

- **Networking Happy Hour**: Ask the Luminaries
- **Women in Echo**: Emerging Echo Enthusiasts (E3) and Early Career Research
- **Virtual Social Gathering**: Virtual Social Gathering
SUNDAY, AUGUST 9  #ASE2020

**CHANNEL DISCOVERY**  
11:00 AM – 11:25 AM  
🌟 Edler Lecture  
Twitter Moderators: A. Klein (@AllanLKleinMD1); V. Rigolin (@RigolinVera)  

11:00 AM - 11:23 AM  
Edler Lecture: The Role of Imaging Today for Developing Drugs of Tomorrow  
J. Lindner  

11:23 AM - 11:25 AM  
Thank you  
T. Abraham

**CHANNEL DISCOVERY**  
11:25 AM – 12:30 PM  
🌟 Echo and COVID  
Chairs: T. Abraham; N. Parikh  
Twitter Moderators: R. Jain (@renujain19); E. Michos (@ErinMichos); S. Mulvagh (@HeartDocSharon); J. Strom (@DocStrom); R. Thamman (@iamritu); D. Wiener (@DavidWienerMD)  

11:25 AM - 11:35 AM  
Epidemiology of COVID  
G. Rutherford  

11:35 AM - 11:45 AM  
Echo Findings in COVID  
C. Taub  

11:45 AM - 11:55 AM  
Bedside Focused Cardiac Ultrasound in COVID-19 Infection from the Wuhan Epicenter  
L. Zhang  

11:55 AM - 12:05 PM  
Protection of Patients  
J. Kirkpatrick  

12:05 PM - 12:15 PM  
Sonographer Considerations  
K. Collins  

12:15 PM - 12:25 PM  
Perioperative Considerations  
M. Swaminathan  

12:25 PM - 12:35 PM  
Echocardiography in the Time of COVID-19  
M. Picard  

12:35 PM - 12:45 PM  
Reopening the Echo Lab  
J. Hung

**CHANNEL INSIGHT**  
11:00 AM - 12:30 PM  
🌟 Fetal Symposium: Current and Upcoming Strategies in Management of Fetal Cardiac Disease  
Chair: J. Pruetz  
Twitter Moderators: S. Kutty (@shelbykuttymd); A. Moon-Grady (@moon-grady); P. Shivaram (@PushpaShivaram)  

11:00 AM - 11:15 AM  
New Frontiers in Fetal Cardiac Imaging  
K. Pushparajan; J. Simpson  

11:15 AM - 11:25 AM  
Home Monitoring for Fetal Heart Rhythm  
B. Cuneo  

11:25 AM - 11:40 AM  
International Fetal Cardiac Interventions Registry: Lessons Learnt  
A. Moon-Grady  

11:40 AM - 11:55 AM  
Assessing the Heart in a Fetus with Extracardiac Anomalies  
R. Michelfelder  

11:55 AM - 12:10 PM  
Perinatal Level of Care Guidelines-Impact on Clinical Outcomes  
M. Donofrio  

12:10 PM - 12:20 PM  
Maternal Hyperoxygenation Testing in Fetuses with Hypoplastic Left Heart Syndrome: Predicting Postnatal Physiology  
C. Mardy  

12:20 PM - 12:30 PM  
Question & Answer

**CHANNEL DISCOVERY**  
1:00 PM - 2:30 PM  
🌟 Episode of Care 2: Mitral Valve Disease  
Chairs: S. Little; J. Wong  
Twitter Moderators: N. Faza (@NadeenFaza); E. Michos (@ErinMichos); P. Parwani (@purviparwani); A. Patel (@AmitRPatelMD); R. Thamman (@iamritu); D. Wiener (@DavidWienerMD)  

POCUS  
J. Lopez Mattei  
Cath Lab  
V. Mahadevan  

CT  
A. Patel  
CT Surgeon  
D. Drake  

Echo Sonographer  
C. Kramer  
Periop  
D. Shook  

Echocardiographer  
A. Qasim  
ICU Care  
A. Kumaresan  

MRI  
V. Ferrari  
Question & Answer
**CHANNEL EXPLORER**

1:30 PM - 3:00 PM

🌟 Arthur E. Weyman Young Investigator’s Award Competition and 20th Annual Feigenbaum Lecture

Chair: M. Main
Judges: T. Edvardsen; J. Hung; H. Leong-Poi; S. Mulvagh; A. Weyman; K. Yakamoto
Twitter Moderators: T. Edvardsen (@ThorEdvardsen); J. Hung (@JudyHungMD); S. Mulvagh (@HeartDocSharon); V. Sorrell (@VLSorrellImages); M. Swaminathan (@mswami001)

1:30 PM - 1:35 PM
Welcome and Introduction
M. Main

1:35 PM - 1:47 PM
YIA-1: Ultrasound Enhanced S100A4-shRNA Delivery Using Acoustically Activated Cationic Lipid Nanodroplets to Reach and Treat Myocytes within the Developing Scar Zone
L. Qian

1:47 PM - 1:59 PM
YIA-2: Projected Transmitral Gradient: A Novel Tool for Assessment of Mitral Stenosis
N. Kato

1:59 PM - 2:11 PM
YIA-3: Exploring the Phenotypic Spectrum of Left Ventricular Hypertrophy in Hypertension and Hypertrophic Cardiomyopathy Using a Machine-Learning Approach: A Pilot Study
F. Loncaric

2:11 PM - 2:23 PM
YIA-4: Deep Learning Models of Diastolic Dysfunction: Channel Insights from the TOPCAT Echocardiography Sub-Study
A. Pandey

2:23 PM - 2:25 PM
Concluding Remarks
M. Main

2:25 PM - 2:28 PM
Introduction to the Feigenbaum Lecturer
M. Swaminathan

2:28 PM - 2:48 PM
Feigenbaum Lecture: Beyond Artificial: Echocardiography from Elegant Images to Analytic Intelligence
S. Kutty

2:48 PM - 2:53 PM
Recognition of Feigenbaum Lecture, Presentation of Plaque, Concluding Remarks
H. Feigenbaum

2:53 PM - 3:00 PM
Presentation of YIA Plaques and Winner Announcement
A. Weyman

**CHANNEL GUIDEPOINT**

1:30 PM - 2:30 PM

❤️ Cardio-Oncology in the Real World
(Joint ASE/EACVI Session)
Chair: M. Scherrer-Crosbie
Twitter Moderator: E. Garcia-Sayan (@EGarciaSayan)

1:30 PM - 1:35 PM
Case 1
S. Cauduro

1:35 PM - 1:50 PM
Discussion Traditional Cardio-Toxicity
T. Edvardsen

1:50 PM - 1:55 PM
Case 2
A. Yu

1:55 PM - 2:10 PM
Discussion: Cardiac Effects of Novel Cancer Therapeutics
J. Plana

2:10 PM - 2:15 PM
Case 3
P. Thavendiranathan

2:15 PM - 2:30 PM
Discussion: “But Wait, There’s More:” Cardio-Oncology Beyond the Myocardium
B. Cosyns

**CHANNEL INSIGHT**

1:30 PM - 2:30 PM

⡱ Challenging Cases: Fetus to Adults with Congenital Heart Disease
Chair: C. Taylor
Panelists: A. Dorfman; B. Eidem
Twitter Moderators: A. Dorfman (@drdorfkidsheart); S. Kutty (@ShelbyKuttyMD); P. Shivaram (@PushpaShivaram); M. Wasserman (@MelisWasserman)

1:30 PM - 1:40 PM
Fetus with Ebstein Anomaly: What Predicts Perinatal Outcomes?
L. Freud

1:40 PM - 1:50 PM
A Neonate with CC-TGA: When and How to Intervene?
C. Taylor
1:50 PM - 2:00 PM
DORV with Straddling AV Valve: Is BiV Repair Feasible?
M. Quartermain

2:00 PM - 2:10 PM
Infant with Complete AV Canal Defect: How Can 3D Echo Help?
A. Parthiban

2:10 PM - 2:20 PM
Young Adult with a New Diagnosis of Coarctation: What Else Do I Need to Look For?
S. Pickard

2:20 PM - 2:30 PM
Young Adult with Repaired Tetrology of Fallot: How to Assess Melody Valve Dysfunction?
J. Lu

CHANNEL DISCOVERY
4:00 PM - 4:30 PM

S Chalk Talk
Contemporary Evaluation of Valve Disease
W. Zoghbi

CHANNEL DISCOVERY
4:30 PM - 5:00 PM

S Chalk Talk
Fundamentals and Applications of Strain
T. Kolias

CHANNEL EXPLORER
4:00 PM - 5:00 PM

Echo Technology at the Cutting Edge of Knowledge
Chairs: S. Morhy; M. Swaminathan
Twitter Moderators: A. Aneja (@ash71us); R. Janardhanan (@rajdoc2005); A. Klein (@AllanLKleinMD1); S. Mulvagh (@HeartDocSharon)

4:00 PM - 4:10 PM
State-of-the-Art: Myocardial Contrast Echocardiography
J. Lindner

4:10 PM - 4:20 PM
Myocardial Contrast Echocardiography and Wall Motion Assessment for Chest Pain in the Emergency Department
K. Wei

4:20 PM - 4:30 PM
Myocardial Contrast Echocardiography for Assessment of Viability and Residual Ischemia Post Fibrinolytic Therapy
R. Senior

4:30 PM - 4:40 PM
Sonothrombolysis in Acute Myocardial Infarction
W. Mathias

4:40 PM - 4:50 PM
Coming Down the Pike: Innovations in Myocardial Infarction Diagnosis and Therapy
T. Porter

4:50 PM - 5:00 PM
Question & Answer

CHANNEL INSIGHT
4:00 PM - 5:00 PM

Imaging Solutions to Clinical Conundrums in Congenital Heart Disease
Chairs: N. Ayres; B. Landeck
Twitter Moderators: K. Farooqi (@Kfarooq); S. Kutty (@ShelbyKuttyMD); P. Shivaram (@PushpaShivaram); M. Wasserman (@MeilsWasserman)

4:00 PM - 4:10 PM
Bi-Ventricular Conversion
G. Marx
4:10 PM - 4:20 PM  
Panel Discussion

4:20 PM - 4:30 PM  
Anomalous Origin of Coronaries  
P. Frommelt

4:30 PM - 4:40 PM  
Panel Discussion

4:40 PM - 4:50 PM  
D-TGA  
M. Cohen

4:50 PM - 5:00 PM  
Panel Discussion

**CHANNEL DISCOVERY**  
5:00 PM - 6:30 PM

- **Episode of Care 3: Cardiomyopathy - MCS - Transplant**  
  Chairs: J. Kirkpatrick; T. Nguyen  
  Twitter Moderators: J. Lopez-Mattei (@onco_cardiology); E. Michos (@ErinMichos); R. Thamman (@iamritu); D. Wiener (@DavidWienerMD)

  - POCUS
  - N. Panebianco
  - CT
  - M. Garcia
  - Nuclear
  - R. Quaife
  - Echo Sonographer
  - M. Jankowski
  - Echocardiographer
  - F. Silvestry

  Question & Answer

**CHANNEL EXPLORER**  
5:30 PM - 6:30 PM

- **Inflammatory Cardiovascular Diseases (ASE/JSE Joint Session)**  
  Chairs: I. Kronzon; K. Yakamoto  
  Twitter Moderators: A. Aneja (@ash71us); R. Janardhanan (@rajdoc2005); P. Parwani (@purviperwani)

  5:30 PM - 5:40 PM  
  Cardiac Sarcoidosis: Role of Echocardiography in Multimodality Imaging  
  K. Hirata

  5:40 PM - 5:50 PM  
  Cardiac Disorders in Connective Tissue Diseases  
  C. Izumi

  5:50 PM - 6:00 PM  
  HIV  
  J. Kizer

  6:00 PM - 6:10 PM  
  Arterial Inflammatory Diseases: Takasayu, Kawasaki, CSS, WG, PAN, and Behcets  
  R. LeLeiko

  6:10 PM - 6:20 PM  
  Sepsis: The Role of Inflammation  
  M. Lanspa

  6:20 PM - 6:30 PM  
  Non-Traditional Causes of Cardiac Inflammation  
  D. Sanborn

**CHANNEL GUIDEPOINT**  
5:30 PM - 6:30 PM

- **HFpEF: Everything You Need to Know... And More**  
  Chair: A. Radhakrishnan  
  Twitter Moderator: C. Harrington (@md_harrington)

  5:30 PM - 5:45 PM  
  Ventricular and Vascular Physiology, and Hemodynamics  
  G. Aurigemma

  5:45 PM - 6:00 PM  
  Myocardial Relaxation and Stiffness in the Era of Mechanics  
  O. Smiseth

  6:00 PM - 6:15 PM  
  How Will We Measure Diastolic Function 10 Years From Now?  
  S. Nagueh

  6:15 PM - 6:20 PM  
  Case Discussion: What to Do When the Numbers Don’t Fit the Guidelines?  
  C. Harrington

  6:20 PM - 6:25 PM  
  Case Discussion: Clues to Etiology of HFpEF  
  M. Bansal

  6:25 PM - 6:30 PM  
  Case Discussion: Exercise Testing  
  B. Lefebvre
**CHANNEL INSIGHT**

5:30 PM - 6:30 PM

**Multimodality Imaging from Fetus to Young Adults**

Chair: D. Parra
Twitter Moderators: K. Farooqi (@Kfarooqi); S. Kutty (@ShelbyKuttyMD); P. Shivaram (@PushpaShivaram)

5:30 PM - 5:40 PM

Aorta in Congenital Heart Disease
J. Chew

5:40 PM - 5:50 PM

Coronary Evaluation in Young Adults with Repaired Congenital Heart Disease
A. Powell

5:50 PM - 6:00 PM

Assessment of Conduits and Baffles
T. Slesnick

6:00 PM - 6:10 PM

Evaluation of a Failing Fontan
M. DiMaria

6:10 PM - 6:15 PM

Rare Fetal Case of Complex Vascular and Cardiac Interdependence in Omphaloischiopagus Conjoined Twins
M. Gaitonde

6:15 PM - 6:30 PM

Question & Answer

**6:30 PM - 7:30 PM**

**NETWORKING AND HAPPY HOUR**

Visit just one channel or go between channels if more than one topic is of interest. Attendees have an opportunity to ask questions through the chat function and listen to conversations in a much more casual and relaxed setting.

**CHANNEL DISCOVERY**

**Ask the Luminaries**

Panel Discussion
Pam Douglas, MD, FASE
Judy Hung, MD, FASE
Bijoy Khandheria, MD, FASE
Roberto Lang, MD, FASE
Jane Marshall, RDTS (AE/PE), FASE
Margaret Park, BS, ACS, RDTS, RVT, FASE
Vera Rigolin, MD, FASE
William Zogbhi, MD, FASE

**CHANNEL EXPLORER**

**Women in Echo**

6:30 PM - 6:40 PM

Woman in Cardiology: Navigating Your Career
A. Poppas

Panel Discussion
Peg Knoll, RDTS, RCS, FASE
Sharon Mulvagh, MD, FASE
Alina Nicoara, MD, FASE
Athena Poppas, MD, FASE
Ritu Thamman, MD, FASE

**CHANNEL INSIGHT**

**Emerging Echo Enthusiasts (E3) and Early Career**

Panel Discussion
Serge Harb, MD
Enrique Garcia-Sayan, MD, FASE
Akhil Narang, MD, FASE
Lucy Safi, DO, FASE

**CHANNEL GUIDEPOINT**

**Research**

Panel Discussion
Brian Fowlkes, PhD, FAIUM
Jonathan Lindner, MD, FASE
Carol Mitchell, PhD, RDMS, RDTS, RVT, RT(R), ACS, FASE
Marielle Scherrer-Crosbie, MD, PhD, FASE
## ASE Virtual Experience Schedule at a Glance

### Monday, August 10 11:00 AM – 6:00 PM ET

<table>
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<tr>
<th>Time Block</th>
<th>Channel: Future of Echo</th>
<th>Channel: Progress in Science and Technology</th>
<th>Channel: Guidelines and Best Practice</th>
<th>Channel: Right Ventricle</th>
<th>Exhibit Hall Open</th>
<th>Channel: Basic</th>
<th>Channel: Intermediate</th>
<th>Channel: Advanced</th>
<th>Channel: POC</th>
<th>Channel: Special Sessions</th>
<th>Channel: Valves</th>
</tr>
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<tbody>
<tr>
<td>11:00 AM – 12:00 PM ET</td>
<td>Stress Echo: Beyond the Borders</td>
<td>Simulated Heart Valve Team Cases Discussion: Tricuspid</td>
<td>Cardiac Function Assessment and Outcomes</td>
<td>Multimodality Right Ventricle</td>
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**Event Highlights:**
- **Future of Echo:**
  - Stress Echo: Beyond the Borders
  - Simulated Heart Valve Team Cases Discussion: Tricuspid
- **Progress in Science and Technology:**
  - Cardiac Function Assessment and Outcomes
  - Multimodality Right Ventricle
- **Guidelines and Best Practice:**
  - Right Heart Valve Disease: Tricuspid Regurgitation and Pulmonary Regurgitation
- **Right Ventricle:**
  - Right Heart Valve Disease: Tricuspid Regurgitation and Pulmonary Regurgitation

**Additional Sessions:**
- **Clinical Practice:**
  - Circulation: A Cross Section
  - Echo in Women
- **Innovation:**
  - Innovation in POCUS: A Case-based Approach
  - The Right Stuff!
- **Valves:**
  - Emerging Concepts & Novel Techniques
  - Brian Haluska Sonographer Research Award Competition
- **Early Career:**
  - Dual Perspectives: Early Career
  - This Just Ain’t Right: Right Sided Valve and Ventricular Interventions

**Register for ASE Virtual Experience:**
- To view the full schedule and register for the event, visit the official ASE website or the virtual platform provided.
**CHANNEL DISCOVERY**
11:00 AM - 12:00 PM

**Stress Echo: Beyond the Borders**
Chair: V. Rigolin
Twitter Moderators: J. Aragam (@AragamJayashri); M. Chetrit (@ChetritMichael); A. Narang (@AkhilNarangMD); V. Rigolin (@RigolinVera)

11:00 AM - 11:10 AM
How to Interpret Diastolic Changes During Stress Induced Ischemia
M. Chetrit

11:10 AM - 11:20 AM
Strain During Stress Echo: Value and limitations
E. Donal

11:20 AM - 11:30 AM
Evaluation of Right Ventricular Function During Stress
J. Aragam

11:30 AM - 11:40 AM
3D Stress: Does It Have A Role?
M. Ahmad

11:40 AM - 11:50 AM
Exercise Stress Echo in Congenital Heart Disease
I. El-Assad

11:50 AM - 12:00 PM
Question & Answer

**CHANNEL EXPLORER**
11:00 AM - 12:00 PM

**Simulated Heart Valve Team Cases Discussion: Tricuspid**
Chairs: R. Hahn; M. Reisman
Twitter Moderators: E. Gill (@edwardagill); R. Hahn (@hahn_rt); R. Jain (@renujain19)

11:00 AM - 11:10 AM
Tricuspid Valve Imaging for Tricuspid Valve Clipping
G. Mackensen

11:10 AM - 11:20 AM
3D ICE for Tricuspid Valve Clipping
E. Gill

11:20 AM - 11:30 AM
Pre Procedure Imaging for Tricuspid Valve Clipping
E. Salcedo

11:30 AM - 11:40 AM
Tips for Tricuspid Valve Clip Procedure
R. Hahn

**CHANNEL GUIDEPOINT**
11:00 AM - 12:00 PM

**Cardiac Function Assessment and Outcomes**
Chair: P. Frommelt
Twitter Moderators: S. Kutty (@ShelbyKuttyMD); P. Shivaram (@PushpaShivaram); Melissa Wasserman (@MelisWasserman)

11:00 AM - 11:10 AM
Right Ventricular Adaptations to Pressure and Volume Overload
M. Friedberg

11:10 AM - 11:20 AM
How Do Echo Markers of Right Ventricular Function Relate to Outcomes
S. Buddhe

11:20 AM - 11:30 AM
Left Ventricular Rotational Mechanics: Channel Insights Into Ventricular Interactions
S. Srivastava

11:30 AM - 11:40 AM
Comprehensive Assessment of Single Ventricular Function
N. Khoo

11:40 AM - 11:50 AM
Echo Predictors of Outcomes in Cardiomyopathies
P. Barker

11:50 AM - 11:55 AM
Non-Invasive Left Ventricular Pressure-Strain Loops, A New Approach to Assess Myocardial Work in Pediatrics
D. Aly

11:55 AM - 12:00 PM
Question & Answer

**CHANNEL INSIGHT**
11:00 AM - 12:00 PM

**Multimodality Right Ventricle**
Chair: S. Spina
Twitter Moderators: L. Badano (@lpbadano); A. Hays (@AllisonGHaysMD); M. Mukherjee (@MMukherjeeMD); A. Patel (@AmitRPatelMD)

11:00 AM - 11:10 AM
Novel Echo Techniques: 3D, Contrast, and Beyond
Y. Han
MONDAY, AUGUST 10

11:10 AM - 11:20 AM
RV Strain: Is It Useful?
L. Rudski

11:20 AM - 11:30 AM
When Echo Is Not Enough: MRI of the Right Ventricle
A. Patel

11:30 AM - 11:40 AM
Imaging in Pulmonary Hypertension
N. Schiller

11:40 AM - 11:50 AM
The Right Ventricle in Right Sided Valve Diseases
V. Pham

11:50 AM - 12:00 PM
Mechanical Circulatory Support for the Right Ventricle
J. Kirkpatrick

CHANNEL DISCOVERY
12:30 PM - 1:30 PM
$ Value Summit: A Business Primer for the Echo Community
Chairs: M. Main; M. Picard
Twitter Moderator: D. Wiener (@DavidWienerMD)

12:30 PM - 12:50 PM
Legislative and Regulatory Update
L. Aronson

12:50 PM - 1:00 PM
PFS, HOPPS, and DRGs: The Xs and Os of Echo Reimbursement
G. Rose

1:00 PM - 1:10 PM
Population Health: What Is it and What Role will Echo Play?
S. Mayer

1:10 PM - 1:30 PM
Question & Answer

CHANNEL EXPLORER
12:30 PM - 1:30 PM
$ Update on Infiltrative Cardiomyopathies
Chairs: T. Edvardsen; A. Pardo
Twitter Moderators: R. Janardhanan (@rajdoc2005); J. Lopez-Mattei (@onco_cardiology); D. Phelan (@DermotPhelanMD)

12:30 PM - 12:40 PM
Cardiac Amyloid: Subtypes and Modern Therapies
M. Hanna

12:40 PM - 12:50 PM
Non Amyloid Storage Diseases: Etiologies, Clinical Presentation & Therapies
L. Blauwet

12:50 PM - 1:00 PM
Strain Echo in Amyloid and Non Amyloid Infiltrative Disease
D. Phelan

1:00 PM - 1:10 PM
CMR in Management of Infiltrative Cardiomyopathies
A. Hays

1:10 PM - 1:20 PM
Nuclear Techniques in Assessment of Infiltrative Cardiomyopathies
M. Pampaloni

1:20 PM - 1:30 PM
Question & Answer

CHANNEL GUIDEPOINT
12:30 PM - 1:30 PM
$ Circulation: A Cross Section
Chairs: F. Shamoun; B. Wells
Twitter Moderator: C. Fanola (@DrCFanola); A. Johri (@amerjohri); B. Wells (@wellsbryanj)

12:30 PM - 12:35 PM
Introduction
B. Wells

12:35 PM - 12:50 PM
Ultrasound in the Diagnosis of Acute Aortic Emergencies
C. Fanola

12:50 PM - 1:05 PM
Spontaneous Coronary Artery Dissection: Now What Do We Do?
E. Kim

1:05 PM - 1:20 PM
The Vascular Manifestations of COVID-19
M. Vorsanger

1:20 PM - 1:30 PM
Question & Answer

CHANNEL INSIGHT
12:30 PM - 1:30 PM
$ Right Heart Valve Disease: Tricuspid Regurgitation and PR
Chairs: P. Pellikka; J. Plana
Twitter Moderators: L. Badano (@lpbadano); R. Janardhanan (@rajdoc2005); S. Kort (@SmadarKort)

12:30 PM - 12:40 PM
Cardiac Amyloid: Subtypes and Modern Therapies
M. Hanna
12:30 PM - 12:40 PM
Cases: Anatomy and Pathology (Mechanism) of Tricuspid Regurgitation
V. Nkomo

12:40 PM - 12:50 PM
Natural History of Tricuspid Regurgitation
K. Tolstrup

12:50 PM - 1:00 PM
Carcinoid/Ebstein
S. Kort

1:00 PM - 1:10 PM
Tricuspid Regurgitation Due to Pacemaker: Is the Pacemaker to Blame?
A. Khanna

1:10 PM - 1:20 PM
Is the Tricuspid Valve Repairable? 2D and 3D Assessment and Imaging Planes
L. Badano

1:20 PM - 1:30 PM
Question & Answer

CHANNEL DISCOVERY
3:30 PM - 4:30 PM
$ Value Summit: Practical Approaches for Achieving Value in Echocardiography

Chairs: B. Byrd; P. Rahko
Twitter Moderator: D. Ignatwoski (@DeniseIgnatows1); A. Johri (@amerjohri)

3:30 PM - 3:40 PM
Our Lab’s Approach to Quality Improvement
M. Bremer

3:40 PM - 3:50 PM
Our Lab’s Approach to POCUS and Limited Echos
R. Grimm

3:50 PM - 4:00 PM
Our Lab’s Approach to Improving Lab Efficiency
B. Khandheria

4:00 PM - 4:10 PM
Our Lab’s Approach to Continuous Learning
J. Marshall

4:10 PM - 4:20 PM
Our Lab’s Approach to Caring for Our Caregivers
A. Hays

4:20 PM - 4:30 PM
Question & Answer

CHANNEL EXPLORER
3:30 PM - 4:30 PM
Innovation in POCUS: A Case-based Approach

Chair: S. Raza
Twitter Moderator: S. Raza (@SamRRazaMD)

3:30 PM - 3:40 PM
POCUS Solves Problems in the Peri-Procedural Arena
K. Subramaniam

3:40 PM - 3:50 PM
POCUS in the Emergency Department
N. Panebianco

3:50 PM - 4:00 PM
The Pregnant Woman and Right Ventricular Strain
S. Shahul

4:00 PM - 4:10 PM
Innovative Use of Ultrasound in Regional Nerve Blocks
A. Tsai

4:10 PM - 4:20 PM
Miniature Technology and Innovation in POCUS
S. Raza

4:20 PM - 4:30 PM
Question & Answer

CHANNEL GUIDEPOINT
3:30 PM - 4:30 PM
Special Session: Echo in Women

Chair: M. Wood
Twitter Moderators: T. Coutinho (@thaiscouthinoCV); N. Scott (@NanditaScott); M. Tweet (@marysia_tweet)

3:30 PM - 3:38 PM
Stress Testing to Diagnose Chest Pain
H. Nguyen

3:38 PM - 3:46 PM
Acute Coronary Syndromes: Takotsubo, SCAD, MINOCA
M. Tweet

3:46 PM - 3:54 PM
Pregnancy: Physiology, Cardiomyopathy, Valves
N. Scott

3:54 PM - 4:02 PM
Vascular and Valves: Aortopathy, TAVR
T. Coutinho

4:02 PM - 4:10 PM
HFpEF
S. Sengupta
4:10 PM - 4:18 PM
Pregnancy and Adult Congenital Heart Disease
I. Harris

4:18 PM - 4:30 PM
Question & Answer

CHANNEL INSIGHT
3:30 PM - 4:30 PM
The Right Stuff
Chair: A. Nicoara
Twitter Moderators: A. Narang (@AkhilNarangMD); L. Safi (@LucySafi)

3:30 PM - 3:45 PM
Peri-Procedural Tricuspid Valve Assessment. Dynamic Valve Geometry, Surgical/Procedural Correlation
A. Maslow

3:45 PM - 4:00 PM
Peri-Procedural Tricuspid Regurgitation Assessment: Should We Change the Way We Think About Tricuspid Regurgitation?
R. Hahn

4:00 PM - 4:15 PM
Peri-Procedural Right Ventricular Functional Assessment: Echocardiography Versus Hemodynamics
N. Silverton

4:15 PM - 4:30 PM
Question & Answer

CHANNEL DISCOVERY
5:00 PM - 6:00 PM
Emerging Concepts & Novel Techniques
Chair: E. Shea
Twitter Moderators: M. Park (@kokopark13); M. Umland (@EchoUmland)

5:00 PM - 5:10 PM
Malignant Mitral Valve Prolapse
S. Roemer

5:10 PM - 5:20 PM
Myocardial Works
A. Davis

5:20 PM - 5:30 PM
Hypertrophic Obstructive Cardiomyopathy Stress
I. Kwan

5:30 PM - 5:40 PM
Emerging Concepts in Tricuspid Evaluation
M. Park

5:40 PM - 5:50 PM
Role of Echo in COVID-19
M. Umland

5:50 PM - 6:00 PM
Question & Answer

CHANNEL EXPLORER
5:00 PM - 6:00 PM
The Brian Haluska Sonographer Research Award Competition
Chair: M. Main
Judges: K. Collins; K. Kasir; S. Mulvagh
Twitter Moderators: K. Kasir (@KasirKelly); S. Mulvagh (@HeartDocSharon)

5:00 PM - 5:03 PM
Welcome and Introduction of Judges
M. Main

5:03 PM - 5:13 PM
SIA-01: Optimal Quantification of Functional Mitral Regurgitation: Comparison of Volumetric and PISA Methods on Mid-Term Outcome
S. Igata

5:13 PM - 5:23 PM
SIA-02: Is There More Than Meets the Eye to TRI and Bicuspid Aortic Valves - Exploring Geometric and Hemodynamic Differences and Recognizing the Need to Optimize the Continuity Equation by Phenotype?
A. Frampton

5:23 PM - 5:33 PM
SIA-03: Respiratory Dependence of Tricuspid Regurgitation
M. Yamat

5:33 PM - 5:43 PM
SIA-04: Cardiac Function Improves in Growth Restricted Fetuses: A Longitudinal Study from in Utero to Three Years After Birth
C. Cassidy

5:43 PM - 5:45 PM
Introduction of Guest Speaker
M. Main

5:45 PM - 5:55 PM
Guest Speaker
H. Warraich

5:55 PM - 6:00 PM
Recognition of Competition Finalists, Announcement of Winner
M. Main
**CHANNEL GUIDEPOINT**

5:00 PM - 6:00 PM

*Dual Perspectives: Early Career*

Chair: L. Freud; R. Thamman
Twitter Moderators: T. Chen (@tiffchenMD); A. Narang (@AkhilNarangMD); L. Safi (@LucySafi); J. Strom (@DocStrom); R. Thamman (@iamritu)

5:00 PM - 5:20 PM
Private Practice vs. Academia
R. Thamman

5:00 PM - 5:20 PM
Private Practice vs. Academia
M. Scherrer-Crosbie

5:20 PM - 5:40 PM
Master of Many vs. Master of One
P. Patil

5:20 PM - 5:40 PM
Master of Many vs. Master of One
S. Wiegers

5:40 PM - 6:00 PM
K or not to K? Start-up Funding Opportunities
S. Peyvandi

5:40 PM - 6:00 PM
K or not to K? Start-up Funding Opportunities
L. Freud

**CHANNEL INSIGHT**

5:00 PM - 6:00 PM

*This Just Ain’t Right: Right Sided Valve and Ventricular Interventions*

Chair: R. Stainback
Twitter Moderators: A. Aneja (@ash71us); N. Faza (@NadeenFaza); R. Jain (@renujain19); R. Janardhanan (@rajdoc2005)

5:00 PM - 5:13 PM
Interventional Options for the Tricuspid Valve
V. Mahadevan

5:13 PM - 5:26 PM
Pre and Intra Operative Imaging for Tricuspid Valve Interventions
S. Little

5:26 PM - 5:39 PM
Percutaneous Options for Right Ventricular Mechanical Support
N. Kapur

5:39 PM - 5:42 PM
Unique Imaging Perspective for Monitoring Right Ventricular Support Devices
R. Stainback
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