Advanced Echo: VIRTUAL EXPERIENCE
featuring content from Echo Hawaii and State-of-the-Art Echocardiography

February 27-28, 2021
#AdvancedEcho

CHAIRS
James D. Thomas, MD, FASE
Past President, ASE
Northwestern Medicine
Chicago, IL

William A. Zoghbi, MD, FASE
Past President, ASE
Houston Methodist Hospital
Houston, TX

CO-CHAIRS
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Oregon Health & Science University
Portland, OR

Sunil V. Mankad, MD, FASE
Mayo Clinic
Rochester, MN

Register at ASEcho.org/AdvancedEcho

Jointly provided by the American Society of Echocardiography and the ASE Foundation.
Overview of Advanced Echo: Virtual Experience

Advanced Echo: Virtual Experience will present the latest information on established and emerging cardiovascular ultrasound technologies. Combining the course directorships of Echo Hawaii and State-of-the-Art Echocardiography, expert faculty will discuss state-of-the-art technologies with a particular focus on how they can be effectively applied in the clinical setting. Case-based approaches are used to discuss new and established applications of echocardiography for diagnosis and guiding management in patients with a broad array of cardiovascular conditions. Topics include: advanced assessment of systolic and diastolic function, 3D/4D imaging, contemporary approaches to valve disease, guidance of interventional procedures, contrast echocardiography, ischemic heart disease, and aortic pathology. When appropriate, multimodality imaging is also covered. Special sessions include workshops on systolic and diastolic function, valvular heart disease, 3D echocardiography, and chamber volumes/left ventricular and right ventricular function/strain.

Who Should Attend

Advanced Echo’s program is designed for adult and pediatric cardiologists, cardiovascular surgeons, anesthesiologists, radiologists, nurses, sonographers, and fellows in training. Participants should have a practical knowledge of echocardiography.

Learning Objectives

Upon completion of this course, participants will be better able to:

- Integrate echocardiographic information in clinical decision making.
- Assess ventricular and valvular function using Doppler hemodynamics.
- Describe Doppler assessment of diastolic function/dysfunction.
- Explain new advances in the echocardiographic assessment of left and right ventricular function, including strain and 3D.
- Integrate echocardiographic assessment of cardiomyopathies and systemic diseases in patient management.
- Define clinical uses of TEE and 3D echocardiography.
- Recognize how echocardiography is used to help manage patients with ischemic heart disease.
- Recognize the role of echo contrast and be able to incorporate its use in the echo laboratory.
- Integrate echo information in the management of complex valvular heart disease.

Course Registration

Registration fees include access to course materials, CME credits*, and MOC points. ASE members receive reduced registration fees as a benefit of membership. The deadline to register is April 19, 2021. Register online today at ASEcho.org/AdvancedEcho.

The content for the course will be available at 9:00 AM ET on Saturday, February 27, 2021.

During the Panel Discussion and Question and Answer sessions, faculty will be joining live to answer participant questions. Questions can be submitted during the session in the “Chat” box feature. All Q&A sessions will be recorded and available on-demand post session.

Registrants will have unlimited on-demand access to the content through April 27, 2021.

ASE Membership

You are welcome to join or renew your ASE membership when you register for Advanced Echo. Your membership will be active through December 31, 2021. Membership rates are the same for new and renewing members.

U.S. Physician/Scientist Membership ................................................ $345
U.S. Sonographer/Allied Health/Vet Membership ............................. $175
International Membership ............................................................... $115
Fellow in Training & Student U.S. and International Membership ........ $75
Rising Star U.S. Membership ............................................................ $160
Rising Star International Membership ............................................ $100
Professional Industry Affiliate ......................................................... $345
Retired U.S. and International Membership ..................................... $100

ASE serves its members in numerous ways by providing education, advocacy, research, practice guidelines, and a community for their profession. ASE membership includes over $750 of FREE CME credits a year, in addition to discounts on all ASE educational courses and products. Also included is a monthly subscription to the Journal of the American Society of Echocardiography (JASE), access to CASE, ASE’s online case reports journal, help with legislative coding and reimbursement issues, and other career resources. A plethora of online tutorials, webinars, and other educational activities make membership beneficial to echocardiographers located around the world. View the extensive list of member benefits at ASEcho.org/Benefits.

Accreditation and Designation

The American Society of Echocardiography is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through joint providership of the American Society of Echocardiography and the American Society of Echocardiography Foundation.

The American Society of Echocardiography designates this live course for a maximum of 11 AMA PRF Category 1 Credits™ pending approval. Physicians should claim only the credit commensurate with the extent of their participation in the activity. Successful completion of this CME activity enables the participant to earn up to 11 MOC points in the American Board of Internal Medicine’s (ABIM) Maintenance of Certification (MOC) program and/or The American Board of Anesthesiology® (ABA) Maintenance of Certification in Anesthesiology Program® or MOCA®. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is ASE’s responsibility to submit participant completion information to ACCME for the purpose of granting ABA MOCA and/or ABIM MOC points.

*Registrants who select the Non-CME registration rate are not able to claim CME.
Invited Faculty

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Sunil V. Mankad, MD, FASE
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FACULTY

Cara Bergeron, RDCS, RVT, FASE
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Houston, TX

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April Peterson, BS, RDCS
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Vera H. Rigolin, MD, FASE
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New York, NY

Sanjiv J. Shah, MD, FASE
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Megan Yamat, RDCS, RCS, ACS, FASE
University of Chicago Medical Center
Chicago, IL

Rebecca T. Hahn, MD, FASE
Columbia University Medical Center
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Judy W. Hung, MD, FASE
President, ASE
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Boston, MA

Madeline Jankowski, BS, RDCS, FASE
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Roberto M. Lang, MD, FASE
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Sharon L. Mulvagh, MD, FRCP(C), FASE
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Halifax, NS

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University of Virginia
Charlottesville, VA

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Chicago, IL

Laura B. McFadden, MD, FASE
University of Virginia
Charlottesville, VA

Instructor: J. Thomas, W. Zoghbi

Saturday, February 27, 2021

Assessment of Systolic and Diastolic Function

Moderator: J. Thomas

10:00 AM Welcome and Course Orientation
J. Thomas, W. Zoghbi

10:05 AM Welcome from the ASE President
J. Hung

10:10 AM Assessment of Systolic Function: The Need for Contrast and 3D?
S. Mulvagh

10:25 AM Implementing Strain Imaging in a Busy Lab: What Does Global Longitudinal Strain Add to Ejection Fraction?
S. Mankad

10:40 AM Applications of Strain Imaging: Cardio-Oncology, Amyloidosis
S. Shah

10:55 AM Break

11:10 AM Assessment of Diastole: Guideline Nuances
J. Oh

11:25 AM A Holistic Approach to Heart Failure with Preserved Ejection Fraction
S. Shah

11:40 AM Improving Our Assessment of Right Ventricular Function: Strain and 3D
R. Lang

11:55 AM Panel Discussion and Q&A
All Faculty

12:25 PM Break

Imaging in the Evaluation of Coronary Artery Disease and Cardiomyopathies

Moderator: J. Lindner

12:55 PM Evidence-Based Use of Non-Invasive Functional or Anatomic Imaging
V. Rigolin

1:10 PM Increasing Your Accuracy With Stress Echo
T. Ryan

1:25 PM Perfusion Imaging With Myocardial Contrast Echocardiography
J. Lindner

1:40 PM Diastolic Stress Test: Is It Ready for Prime Time?
S. Lester

1:55 PM Break

2:10 PM Hypertrophic Cardiomyopathy: Role of Echo/Doppler and Contrast
W. Zoghbi

2:25 PM Pericardial Diseases: Role of Echocardiography, Computed Tomography, and Cardiovascular Magnetic Resonance
J. Oh

2:40 PM Panel Discussion and Q&A
All Faculty

3:10 PM Break

Schedule of Events
All content will be presented in Eastern Time Zone (ET)
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**ADVANCED TOPICS IN ECHOCARDIOGRAPHY**
Moderator: S. Mankad

2:15 PM  COVID and the Heart: What We Know Now
          S. Mulvagh

2:30 PM  Echo in Advanced Heart Failure: Extracorporeal
          Membrane Oxygenation, Ventricular Assist Device, and
          Transplant
          M. Saric

2:45 PM  How Can We Refine Our Assessment of Atrial Function?
          J. Oh

3:00 PM  Myocardial Work Imaging: Is It Worth the “Lecture?”
          J. Thomas

3:15 PM  Break

3:30 PM  How Will Artificial Intelligence Change the Practice of
          Echocardiography?
          S. Lester

3:45 PM  Therapeutic Ultrasound: Theranostics Around the
          Corner
          J. Lindner

4:00 PM  Panel Discussion and Q&A
          All Faculty

4:30 PM  Adjourn

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**BREAKOUTS AND READ WITH THE EXPERTS**

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Moderator(s)</th>
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<tbody>
<tr>
<td>3:25 –</td>
<td>3D Echocardiography</td>
<td>R. Lang (moderator), J. Hung, S. Little, M. Yamat</td>
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<tr>
<td>4:55 PM</td>
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<tr>
<td>3:25 –</td>
<td>Quantitation: Chamber Volumes/Left Ventricular and Right Ventricular Function/Strain</td>
<td>J. Thomas (moderator), M. Jankowski, J. Lindner, T. Ryan</td>
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<td>4:55 PM</td>
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<tr>
<td>3:25 –</td>
<td>Valvular Heart Disease</td>
<td>W. Zoghbi (moderator), C. Bergeron, S. Mankad, M. Saric</td>
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<td>4:55 PM</td>
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<tr>
<td>3:25 –</td>
<td>Diastology</td>
<td>J. Oh (moderator), S. Lester, A. Peterson, S. Shah</td>
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**SUNDAY, FEBRUARY 28, 2021**

**IMAGING IN STRUCTURAL HEART DISEASE I**
Moderator: W. Zoghbi

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Moderator</th>
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<tbody>
<tr>
<td>10:00 AM</td>
<td>Challenging Scenarios in Aortic Stenosis</td>
<td>V. Rigolin</td>
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<tr>
<td>10:15 AM</td>
<td>Mitral Regurgitation: Pearls from the Guidelines</td>
<td>W. Zoghbi</td>
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<tr>
<td>10:30 AM</td>
<td>A Systematic Approach to Multivalvular Disease</td>
<td>J. Thomas</td>
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<td>10:45 AM</td>
<td>Interventional Guidance: What Does It Take to</td>
<td>S. Little</td>
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<td>Succeed?</td>
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<tr>
<td>11:00 AM</td>
<td>Cases in Valvular Heart Disease, Panel Discussion, and Q&amp;A</td>
<td>S. Little, V. Rigolin, J. Thomas</td>
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<tr>
<td>11:30 AM</td>
<td>Break</td>
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**IMAGING IN STRUCTURAL HEART DISEASE II**
Moderator: R. Hahn

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<thead>
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<th>Topic</th>
<th>Moderator</th>
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<tbody>
<tr>
<td>11:45 AM</td>
<td>New Horizons in Tricuspid Regurgitation</td>
<td>R. Hahn</td>
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<tr>
<td>12:00 PM</td>
<td>How Do You Evaluate Prosthetic Valve Function?</td>
<td>S. Little</td>
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<tr>
<td>12:15 PM</td>
<td>Residual Valve Regurgitation After Catheter-Based Interventions? The Latest ASE Guidelines</td>
<td>W. Zoghbi</td>
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<tr>
<td>12:30 PM</td>
<td>Left Atrial Occluders: What Does An Imager Need to Know?</td>
<td>M. Saric</td>
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<td>12:45 PM</td>
<td>Break</td>
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<tr>
<td>1:00 PM</td>
<td>Cases in Valvular Heart Disease</td>
<td>R Hahn, S. Mankad, M. Saric</td>
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<tr>
<td>1:30 PM</td>
<td>Panel Discussion and Q&amp;A</td>
<td>All Faculty</td>
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<tr>
<td>1:45 PM</td>
<td>Break</td>
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SEE YOU NEXT YEAR

Echo Hawaii
January 17–21, 2022 | Kohala Coast, HI

State-of-the-Art Echocardiography
February 11–14, 2022 | Scottsdale, AZ