State-of-the-Art Echocardiography

October 2-4, 2020
Hilton Downtown Cleveland

Attend and Get MOC Points!

Featuring:
• Reduced fees for ASE members
• Hands-On Workshops
• Case Discussions

State-of-the-Art Echocardiography is offered in cooperation with the American Society of Echocardiography.

Register Today! ccfcme.org/EchoCardio20
Registration

Register Online at www.ccfcme.org/EchoCardio20

The fee includes continental breakfasts and refreshment breaks on all 3 days and lunch on Saturday. Online PDF versions of faculty presentations will be made available to attendees after the meeting concludes. Optional workshops are subject to additional fees.

<table>
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<th>Category</th>
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*To obtain the discounted fee, a confirmatory letter from your program director must be received by September 18, 2020. Otherwise, the full physician fee will be charged.

Group Discount Available

Groups of 3 or more from the same office/institution will receive a $100.00 discount off the full registration fee. Registrants must call 216.448.8710 to receive a promotional code for this special pricing.

Visit www.ccfcme.org/EchoCardio20 for complete registration information.

Registration and Cancellation

Online registrations will be accepted until 12:00 pm ET on September 30, 2020. You may register at the site on October 2, 2020. Full refunds will be issued for cancellations received via email by September 2, 2020. If you cancel after September 2, 2020, a $250 cancellation fee will be deducted from your refund. No refunds will be issued after September 25, 2020.

For questions about registration or cancellation, email us at info@med-iq.com or call 866.858.7434

The Cleveland Clinic Center for Continuing Education reserves the right to cancel or postpone an activity at its sole discretion. In the unlikely event that this occurs, any registration fee(s) paid will be refunded. Be advised that Cleveland Clinic is not responsible for any related costs, including airline tickets, hotel costs, or any similar costs or penalties incurred as a result of any meeting cancellations or changes.
General Information

Location
Hilton Cleveland Downtown
100 Lakeside Avenue East
Cleveland, OH
216.413.5000

Hotel Accommodations
A limited block of rooms has been reserved at the Hilton Cleveland Downtown only until September 1, 2020.

To make your reservations, book online at www.ccfcme.org/EchoHotel for special rate of $199.00 per night for a standard room.

Visit www.positivelycleveland.com for additional information on attractions and entertainment.

Parking
Valet parking is available at the Hilton and self-parking is also available at the Huntington Garage on Lakeside Avenue.

Information
For further information about this activity, contact the Med-IQ Call Center.
Website: ccfcme.org/EchoCardio20
Call: 866.858.7434

Faculty Disclosure
The Cleveland Clinic Foundation Center for Continuing Education has implemented a policy to comply with the current Accreditation Council for Continuing Medical Education Standards for Commercial Support requiring resolution of all faculty conflicts of interest. Faculty declaring a relevant commercial interest will be identified in the activity syllabus.

Americans with Disabilities Act
The Cleveland Clinic Foundation Center for Continuing Education fully intends to comply with the legal requirements of the Americans with Disabilities Act. If you need assistance, please notify us at least two weeks prior to the activity.

Accreditation
The Cleveland Clinic Foundation Center for Continuing Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Cleveland Clinic Foundation Center for Continuing Education designates
• State-of-the-Art Echocardiography live activity for a maximum of 16.50 AMA PRA Category 1 Credits™
• Optional Incorporating Strain and 3D Volumes/EF Into Your Practice live activity for a maximum of 2 AMA PRA Category 1 Credits™
• Optional 3D Image and Multi-Planar Reconstruction/Display With Emphasis on Structural Heart Interventions live activity for a maximum of 2 AMA PRA Category 1 Credits™
• Optional Echocardiography Simulation Lab: TTE, TEE, POCUS live activity for a maximum of 2 AMA PRA Category 1 Credits™

Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Participants claiming CME credit from this activity may submit the credit hours to the American Osteopathic Association for Category 2 credit.

MOC/Maintenance of Certification
Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 16.50 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

MOC is available for full course registration only.

MOC is not available for workshops.

Other Healthcare Professionals
A certificate of attendance will be provided to other healthcare professionals for requesting credits in accordance with state nursing boards, specialty societies, or other professional associations.
Join us at State-of-the-Art Echocardiography

This State-of-the-Art Echocardiography course highlights practical issues in echocardiography using real-world cardiovascular clinical practice cases. The focus will be on providing guidance for optimal utilization of echocardiography in managing valvular heart disease, heart failure, device therapies, cardiomyopathies, and endocarditis. Special sessions will be dedicated to structural heart interventions, adult congenital cardiology, innovative imaging technologies, and multimodality imaging. Attendees will learn about the most current and relevant research studies, receive updates on new guidelines, and hear experts analyze cutting-edge technical innovations. Multidisciplinary panels of experts—including cardiologists with expertise in structural heart interventions, heart failure, electrophysiology, and multimodality imaging; cardiac surgeons; and cardiothoracic anesthesiologists—will debate challenging cases and interact with attendees. This program will also be of value for physicians who are preparing for initial board certification or a maintenance of certification assessment in general cardiology and echo boards.

Learning Objectives

- Describe the most appropriate methods for imaging and quantifying complex valvular heart disease using basic and advanced imaging techniques to diagnose and manage aortic stenosis and heart valve disease.
- Address the role of echocardiography in diagnosing and managing endocarditis.
- Define the role of echocardiography to diagnose and manage endocarditis.
- Discuss the use and value of echocardiography in assessing diastolic function, stain imaging, and 3-D multiplanar reconstruction.
- Review the utility of echocardiography for optimizing therapy with cardiac implantable electronic devices.
- Improve confidence for taking the initial certification exam or one of the maintenance of certification assessment options for the general cardiology and echo boards.

Target Audience

This activity is designed for cardiologists, cardiac surgeons, anesthesiologists, sonographers, internists, intensive care/critical care practitioners, and other healthcare professionals who desire an update on state-of-the-art advancements in echocardiography.
Heart and Vascular Institute
Cardiovascular Imaging
Cleveland Clinic

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Maran Thamilarasan, MD
Michael Tong, MD
Per Wierup, MD, PhD
Bo Xu, MD
Malek Yaman, MD
Agenda
Friday, October 2, 2020

6:30 AM  Registration & Continental Breakfast

7:20 AM  Welcome and Introduction

Aortic Stenosis Diagnosis and Management (Richard Grimm)
7:30 AM  Echo Doppler Evaluation of Aortic Stenosis
7:45 AM  Low Flow, Low Gradient Aortic Stenosis With Reduced EF – Multimodality Evaluation
8:00 AM  Low Flow, Low Gradient Aortic Stenosis With Preserved FE – Evaluation and Management
8:15 AM  Indications for Intervention for Aortic Stenosis: TAVR vs SAVR
8:30 AM  Prosthetic Aortic Valve Stenosis and PPM-Evaluation and Management
8:45 AM  Special Challenges of Bicuspid Valves and Aortopathy
9:00 AM  Cases in Aortic Stenosis Diagnosis and Management
9:15 AM  Q&A
9:30 AM  BREAK – VIST EXHIBITS

Mitral Regurgitation Diagnosis and Management
10:00 AM  Echo Doppler Quantification of Mitral Regurgitation
10:15 AM  Mechanisms of Mitral Regurgitation and Impact on Management, Use of 3D imaging
10:30 AM  Indications for Surgery in Primary and Secondary MR
10:45 AM  Approach to Echo Diagnosis of Mixed Valve Disease

11:00 AM  Stress Echocardiography as a Tool in Refining Timing of Surgery for Valvular Heart Disease
11:15 AM  Cases in Mitral Regurgitation Diagnosis and Management
11:30 PM  LUNCH – On your own

Echocardiography in the Management of Device Therapies for Heart Failure
1:00 PM  Echo in Left Ventricular Assist Device Management
1:15 PM  Right Ventricular Interrogation in VAD Selection and Management
1:30 PM  Echocardiography in the Management of Circulatory Support: ECMO and Impella
1:45 PM  Echocardiography in CRT Selection, Optimization, Non Responders
2:00 PM  Echocardiography in Management of Cardiac Implantable Electrical Device Infection
2:15 PM  Q&A
2:30 PM  BREAK – VISIT EXHIBITS
3:00 PM  HANDS-ON WORKSHOPS (Optional):

• 3D Image and Multi-Planar Reconstruction/Display With Emphasis on Structural Heart Interventions
• Echocardiography Simulation Lab: TTE, TEE, POCUS

5:00 PM  ADJOURN

*All workshops are subject to additional fees and are first-come/first-served due to limited space.
Saturday, October 3, 2020

**Endocarditis**

6:30 AM  Continental Breakfast
7:30 AM  Clinical and Imaging Diagnosis of Endocarditis
8:00 AM  Management of Endocarditis and the Critical Role of Imaging
8:15 AM  The Changing Face of Prosthetic Valve Endocarditis
8:30 AM  Surgical Management for Endocarditis and Value of Imaging
8:45 AM  Complications of Endocarditis and the Role of Imaging
9:00 AM  Cases in Diagnosis and Management of Endocarditis
9:15 AM  Q&A
9:30 AM  BREAK – VISIT EXHIBITS

**Adult Congenital Heart Disease**

10:00 AM  Systematic Approach to Imaging in CHD
10:15 AM  Atrial and Ventricular Septal Defects
10:30 AM  Transposition of the Great Arteries and Tetralogy of Fallot
10:45 AM  Cyanotic Heart Disease: A Primer in Shunts
11:00 AM  Transcatheter Interventions in CHD
11:15 AM  Postoperative Congenital Heart Disease
11:30 AM  Cases in Diagnosis and Management of Endocarditis
11:45 AM  Q&A
12:00 AM  LUNCH – Provided

**Echo in the Diagnosis and Management of Cardiomyopathy**

1:00 PM  Case 1: Left Ventricular Hypertrophy
1:15 PM  Case 2: Left Ventricular Hypertrophy – Again!
1:30 PM  Case 3: Left Ventricular Dilation
1:45 PM  Case 4: Right Ventricular Dilation
2:00 PM  Case 5: Biventricular Dilation
2:15 PM  Q&A
2:30 PM  BREAK – VISIT EXHIBITS

**Special Topics in Echocardiography**

3:00-5:00 PM  HANDS-ON WORKSHOP

- Incorporating Strain and 3D Volumes/EF Into Your Practice

3:00 PM  Diastolic Dysfunction
3:15 PM  Incorporating Strain Imaging in Practice
3:30 PM  Echo in Cardio-Oncology
3:45 PM  Echo Contrast for Border Detection and Perfusion
4:00 PM  Imaging Assessment and Quantification of Aortic Regurgitation
4:15 PM  Timing of Intervention for Aortic Regurgitation
4:30 PM  Tricuspid Valve Regurgitation Interrogation and Quantification
4:45 PM  Management and Interventional Options for Tricuspid Valve Regurgitation
5:00 PM  Q&A
5:15 PM  ADJOURN

Sunday, October 4, 2020

**Imaging Guidance in Structural Heart Disease**

7:00 AM  Continental Breakfast
8:00 AM  Introduction to Imaging and Structural Heart Disease for Non Imagers
8:15 AM  Septal Puncture – How to Guide the Interventionalist
8:30 AM  Multimodality Planning for TAVR
8:45 AM  Imaging Guidance of LAA Ocluder Implantation
9:00 AM  MitraClip and Evolving Mitral/Tricuspid Devices
9:15 AM  Paravalvular Leak and Valve-in-Valve Planning/Guidance
9:30 AM  BREAK – VISIT EXHIBITS
10:00 AM  IVUS for Procedural Guidance
10:15 AM  PFO/ASD Closure
10:30 AM  Recognizing Complications in SHD
10:45 AM  Integration of Fluoroscopic Anatomy in Imaging, Tips and Tricks
11:00 AM  Cases in Structural Heart Disease
11:30 AM  Future Directions in Structural Heart Disease
11:45 AM  Q&A
12:00 PM  ADJOURN
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