



Basic to Advanced Echocardiography in Nashville: Music City Ultrasound



MAY 25-28, 2016

Gaylord Opryland, Nashville, TN

Course Directors:

- ▶ *Fletcher A. Miller, Jr., M.D., FACC, FAHA, FASE* | Mayo Clinic, Rochester, MN
- ▶ *Roger L. Click, M.D., Ph.D., FACC* | Mayo Clinic, Rochester, MN
- ▶ *Naser M. Ammash, M.D., FACC* | Mayo Clinic, Rochester, MN and Jacksonville, FL
- ▶ *Pamela R. Burgess, RDCS, RDMS, RVT, FASE* | Wake Forest Baptist Health, Winston-Salem, NC

Division Of Cardiovascular
Diseases In Collaboration With
Wake Forest Baptist Health –
Heart & Vascular Center

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New Location in 2016

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General Information

Course Description

The course will begin with a discussion of echocardiographic assessment of left and right ventricular function, including presentations on diastolic function and strain imaging for assessing myocardial function. We will then discuss a broad range of disease states for which echocardiography is useful, including ischemic heart disease, valvular heart disease, pericardial disease, and cardiomyopathies. The presentations will include basic concepts as well as advanced techniques including 3-D imaging and strain imaging. Throughout the course many cases will be presented.

Unique Features:

- Faculty members are clinical sonographers and echocardiologists
- Easy access to faculty members during the entire conference
- Afternoon on pediatric/adult congenital echocardiography
- Optional lunch session on lab accreditation (ICAEL)
- Live scanning
- Presentations involving multimodality imaging

Course Learning Objectives

Upon conclusion of this program, participants should be able to:

- Apply Doppler principles and hemodynamics to the assessment of valvular heart disease, including systematic assessment of prosthetic valves
- Use 2-D, Doppler strain methods to assess myocardial function
- Illustrate the appropriate use of echo Doppler in myocardial and pericardial disease
- Recognize the utility of echocardiography TEE including 3-D in the interventional practice
- Integrate the application of echocardiography in heart failure and the treatment
- Recognize clinical applications of stress echocardiography

Attendance at this Mayo course does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course.

Intended Audience

This course is intended for adult cardiologists, cardiac sonographers, cardiology fellows, surgeons, anesthesiologists, and those who have basic experience and knowledge of echocardiography. This course is designed to further advance their experience in clinical application of echocardiography.

Credit

Mayo Clinic College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Mayo Clinic College of Medicine designates this live activity for a maximum of 23.25 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

General Information

Other Health Care Professionals

A certificate of attendance will be provided to other health care professionals for requesting credits in accordance with state nursing boards, specialty societies, or other professional associations.

Attendees should ensure in advance that their credentialing or licensing organization accepts *AMA PRA Category 1 Credits*™ from the sponsor of this activity.

Grants and Exhibits

At the time of this printing, a complete listing of commercial supporters (financial or in-kind) was not available. Appropriate acknowledgment will be given to all supporters at the time of the meeting.

Exhibits will be available for viewing at all scheduled breakfast and breaks.

Date and Location

The *Basic to Advanced Echocardiography* course will be held **May 25-28, 2016**. Course headquarters will be located at Gaylord Opryland, 2800 Opryland Drive, Nashville, TN 37214-1200. Phone: 615-889-1000

General Session: Tennessee DE

Registration/Exhibits/Breaks/Breakfast: Tennessee D Foyer

Reception: Water's Edge

Travel/Airport

Nashville International Airport (BNA) is the recommended airport for arrival. Hotel shuttle, taxi, or rental car are recommended modes of transportation from the airport. The hotel is located approximately 20 minutes from the airport.

Driving Directions from Airport:

Travel south on Terminal Drive toward BNA Arriving Flights. After 0.7 mile make a slight right followed by a slight left to stay on Terminal Drive. Travel 0.6 mile and take the ramp onto Interstate 40 West. Travel 1.2 miles to exit 215B and merge onto TN-155 North/Briley Parkway. Travel 4.3 miles to exit 11 for Opry Mills Drive. Continue straight ahead for 0.9 mile to Opryland Drive and turn right. Travel 0.4 mile and turn left to the hotel.

Hotel Shuttle Service:

Airport shuttle service, reservation required, fee \$30 one way (subject to change).
Phone: 615-883-2211.

Rental Car:

Hertz rental car is available at the hotel.

http://offer.hertz.com/offers/index.jsp?targetPage=Welcome_Page_Gaylord_Partner_Pages1.jsp

Travel arrangements are the sole responsibility of the individual registrant.

General Information

Lodging Accommodations

The Gaylord Opryland Resort is a Resort & Convention Center, a premier Opryland hotel in Nashville, TN offering guests all the excitement and energy of Music City under one roof. The resort features an excellent selection of dining, shopping, and recreational activities underneath their signature glass atriums. During downtime, enjoy Opryland hotel's 9 acres of lush indoor gardens and cascading waterfalls. Nashville has more than 150 live music venues throughout the city.

To secure your room at the Gaylord Opryland, please call 877-351-5021 and state that you will be attending the MAYO CLINIC program. The room rate is \$235 single/double which includes the resort fee. The resort fee includes: local and 800 telephone calls (first 20 minutes), in-room high speed internet access, daily on-line access to Wall Street Journal, designated complimentary in-room beverages as well as local shuttle service and fitness center access. Exclusive to Marriott Rewards Gold and Platinum Elite: access to steam, sauna, and locker rooms at the Spa. Premium view upgraded rooms are available for an additional \$50. An additional cost for adults beyond two is \$20 each.

On-line Booking:

https://resweb.passkey.com/Resweb.do?mode=welcome_gi_new&groupID=52915478

The room block is scheduled to be held until Monday, May 2, 2016 but may be sold out before this date. Therefore, we advise you to register for the program and reserve your lodging as soon as possible.

Check-in: 3:00 p.m.

Check-out: 11:00 a.m.

We encourage participation by all individuals. If you have a disability, advance notification of any special needs will help us better serve you.

For further information regarding the area, its attractions and events, please refer to: <http://www.visitmusiccity.com/Visitors/events/upcomingevents>

Lodging arrangements are the sole responsibility of the individual registrant.

Mayo Clinic Division of Cardiovascular Diseases is not responsible for expenses incurred by an individual who is not confirmed and for whom space is not available at the meeting. Costs incurred by the registrant such as airline or hotel fees or penalties are the responsibility of the registrant.

Parking

Discounted on-site parking fee \$15 per day/Valet \$30 per day (subject to change).

Social Programs

Welcome Reception – Wednesday, May 25, 2016 – 6:00-7:00 p.m.

Attendees and their guest(s) are cordially invited to join the course faculty for the Welcome Reception on Wednesday, May 25. This casual reception welcomes you to Nashville and officially opens the course, and offers you the perfect opportunity to make connections with existing and new colleagues.

General Information

Next Year's Dates

Next year's course will be held at The Omni Grove Park Inn in Asheville, NC. Conference dates are **May 17-20, 2017**. A location you will not want to miss!

<http://www.omnihotels.com/hotels/asheville-grove-park>

Faculty

Course Directors

Fletcher A. Miller, Jr., M.D., FACC, FAHA, FASE

Professor of Medicine, Mayo Clinic; Consultant, Division of Cardiovascular Diseases; Past Director, Cardiovascular Ultrasound Imaging and Hemodynamic Laboratory, Mayo Clinic, Rochester, MN

Roger L. Click, M.D., Ph.D., FACC

Associate Professor of Medicine, Mayo Clinic; Consultant, Division of Cardiovascular Diseases, Mayo Clinic, Rochester, MN

Naser M. Ammash, M.D., FACC, FASE

Professor of Medicine, Mayo Clinic; Consultant, Division of Cardiovascular Diseases; Vice-Chair for Clinical Practice, Division of Cardiovascular Diseases, Mayo Clinic, Rochester, MN and Jacksonville, FL

Pamela R. Burgess, RDCS, RDMS, RVT, FASE

Clinical Manager, Cardiac Ultrasound and Stress Testing Lab, Wake Forest Baptist Health, Winston-Salem, NC

Mayo Faculty

Lori A. Blauwet, M.D., M.A., FACC, FAHA, FASE

Associate Professor of Medicine, Mayo Clinic; Consultant, Division of Cardiovascular Diseases, Mayo Clinic, Rochester, MN

Crystal R. Bonnicksen M.D.

Assistant Professor of Medicine, Mayo Clinic; Consultant, Division of Cardiovascular Diseases and Internal Medicine, Mayo Clinic, Rochester, MN

Michael W. Cullen, M.D., FACC

Assistant Professor of Medicine, Mayo Clinic; Senior Associate Consultant, Division of Cardiovascular Diseases, Mayo Clinic, Rochester, MN

Janell K. Fox, RCS

Clinical Congenital Sonographer, Cardiovascular Ultrasound Imaging and Hemodynamic Laboratory, Mayo Clinic, Rochester, MN

Jeffrey B. Geske, M.D.

Senior Associate Consultant, Division of Cardiovascular Diseases, Mayo Clinic, Rochester, MN

George M. Gura, Jr., M.D., FACC

Associate Professor of Medicine, Mayo Clinic; Consultant, Division of Cardiovascular Diseases; Director, International Cardiology Clinic, Mayo Clinic, Rochester, MN

General Information

Victoria R. Jones, RDCS

Clinical Sonographer, Cardiovascular Ultrasound Imaging and Hemodynamic Laboratory, Mayo Clinic, Rochester, MN

Garvan C. Kane, M.D., Ph.D., FASE, FCCP

Associate Professor of Medicine, Mayo Clinic; Co-Director, Cardiovascular Ultrasound Imaging and Hemodynamic Laboratory; Director of Structural Heart Disease Research; Consultant, Division of Cardiovascular Diseases, Mayo Clinic, Rochester, MN

Barry L. Karon, M.D., FACC, FASE

Assistant Professor of Medicine, Mayo Clinic; Consultant, Division of Cardiovascular Diseases, Mayo Clinic, Rochester, MN

Amy W. Pollak, M.D., M.S.

Assistant Professor of Medicine, Mayo Clinic; Consultant, Division of Cardiovascular Diseases, Mayo Clinic, Jacksonville, FL

Nathaniel W. Taggart, M.D., FACC

Assistant Professor of Pediatrics, Mayo Clinic; Consultant, Division of Pediatric Cardiology, Mayo Clinic, Rochester, MN

Guest Faculty

Beverly Gorman, RDCS

Director of Accreditation - Echocardiography, Intersocietal Accreditation Commission (IAC), Ellicott, MD

Dalane W. Kitzman, M.D., FACC

Professor of Medicine (With Tenure): Cardiology and Geriatrics, Wake Forest University School of Medicine, Winston-Salem, NC

Frederick W. Kremkau, Ph.D., FACR, FAIMBE, FAIUM, FASA

Past President, American Institute of Ultrasound in Medicine; Professor and Co-Director, Program for Medical Ultrasound, Center for Applied Learning, Wake Forest University School of Medicine, Winston-Salem, NC

Furrukh S. Malik, M.D., FACC

Consultant, Heart & Vascular Center, Centennial Medical Center, Nashville, TN

Faculty Disclosure

As a provider accredited by ACCME, Mayo Clinic College of Medicine (Mayo School of Continuous Professional Development) must ensure balance, independence, objectivity and scientific rigor in its educational activities. Course director(s), planning committee, faculty, and all others who are in a position to control the content of this educational activity are required to disclose all relevant financial relationships with any commercial interest related to the subject matter of the educational activity. Safeguards against commercial bias have been put in place. Faculty also will disclose any off-label and/or investigational use of pharmaceuticals or instruments discussed in their presentation. Disclosure of this information will be published in course materials so those participants in the activity may formulate their own judgments regarding the presentation.

Program Schedule

Wednesday, May 25, 2016

7:00 a.m. **Registration and Continental Breakfast**
Tennessee D Foyer

7:30 a.m. **Welcome**
Roger L. Click, M.D., Ph.D.

FUNDAMENTALS

Dr. Roger L. Click, presiding

7:40 a.m. **Cases - Teasers**
Drs. Miller, Click, and Ammash

8:00 a.m. **Imaging Principles and Artifacts**
Frederick W. Kremkau, Ph.D.

8:30 a.m. **LV Volumes and Function**
Amy W. Pollak, M.D.

9:00 a.m. **Diastolic Function**
Dalane W. Kitzman, M.D.

9:30 a.m. **Strain for Left Ventricular Function**
Fletcher A. Miller, Jr., M.D.

10:00 a.m. **Refreshment Break**

10:30 a.m. **Cases in Ventricular Function**
Victoria R. Jones, RDCS, Janell K. Fox, RCS, and Pamela R. Burgess, RDCS

11:00 a.m. **RV Function and Pressure**
Garvan C. Kane, M.D., Ph.D.

11:30 a.m. **Echo in Congestive Heart Failure: When and Why**
Barry L. Karon, M.D.

12:00 p.m. **Panel Discussion**
Drs. Kremkau, Pollak, Kitzman, Miller, and Kane; Dr. Click, moderator

12:30 p.m. **Lunch**
Water's Edge Outdoors

IAC Optional Session (Box Lunch Provided)

12:45-1:45 p.m. **The New QI Story - Echo Lab Accreditation & Reaccreditation**
Ms. Burgess and Ms. Gorman

ECHO FOR MYOCARDIAL AND PERICARDIAL DISEASE

Dr. Fletcher A. Miller, Jr., presiding

2:00 p.m. **Assessment of HCM**
Jeffrey B. Geske, M.D.

Program Schedule

- 2:30 p.m. **Echo in Restrictive Cardiomyopathies**
Naser M. Ammash, M.D.
- 3:00 p.m. **Cardiac Constriction**
Barry L. Karon, M.D.
- 3:30 p.m. **Refreshment Break**
- 4:00 p.m. **Cases**
Drs. Cullen, Gura, Karon, Miller, Ammash, and Click
- 5:00 p.m. **Panel Discussion**
Drs. Geske, Ammash, and Karon; Dr. Miller, moderator
- 5:30 p.m. **Adjourn**
- 6:00-7:00 p.m. **Welcome Reception**
Water's Edge (Attendees, guests, and faculty invited.)

Thursday, May 26, 2016

- 7:00 a.m. **Continental Breakfast**
Tennessee D Foyer

ISCHEMIC HEART DISEASE/AORTIC DISEASE

Dr. Naser M. Ammash, presiding

- 7:30 a.m. **Contrast Echocardiography**
Dalane W. Kitzman, M.D.
- 8:00 a.m. **Cases in Exercise Echocardiography**
Michael W. Cullen, M.D.
- 8:30 a.m. **Cases in Pharmacologic Stress Echo**
Garvan C Kane, M.D., Ph.D.
- 9:00 a.m. **Case-Based – Stress Hemodynamics**
Drs. Cullen and Geske
- 9:30 a.m. **Panel Discussion**
Drs. Kitzman, Cullen, Kane, and Geske; Dr. Ammash, moderator
- 10:00 a.m. **Refreshment Break**
- 10:30 a.m. **Surprises in Stress Echo – Good and Bad**
Dalane W. Kitzman, M.D.
- 11:00 a.m. **Echo for Acute Coronary Syndromes**
Roger L. Click, M.D., Ph.D.
- 11:30 a.m. **Echo for Acute Aortic Syndromes**
Crystal R. Bonnicksen, M.D.
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Program Schedule

12:00 p.m. **Panel Discussion**
Drs. Kitzman, Click, and Bonnicksen; Dr. Ammash, moderator

12:30 p.m. **Adjourn for the Afternoon**

Friday, May 27, 2016

7:00 a.m. **Continental Breakfast**
Tennessee D Foyer

ECHO FOR VALVE DISEASE
Dr. George M. Gura, Jr., presiding

7:30 a.m. **Echo for Aortic Stenosis – Including Low Output-Low Gradient**
Amy W. Pollak, M.D.

8:00 a.m. **Echo for Aortic Regurgitation**
Fletcher A. Miller, Jr., M.D.

8:30 a.m. **Echo for Mitral Regurgitation**
Lori A. Blauwet, M.D.

9:00 a.m. **Echo for Right-Sided Valves**
Roger L. Click, M.D., Ph.D.

9:30 a.m. **Panel Discussion**
Drs. Pollak, Miller, Blauwet, and Click; Dr. Gura, moderator

10:00 a.m. **Refreshment Break**

10:30 a.m. **Live Scanning**
Fletcher A. Miller, Jr., M.D., Furrukh S. Malik, M.D., Victoria R. Jones, RDCS, Janell K. Fox, RCS, and Pamela R. Burgess, RDCS

12:30 p.m. **Lunch**
Old Hickory Steak House

CONGENITAL ECHO
Dr. Naser M. Ammash, presiding

1:30 p.m. **Echocardiography in the Evaluation of RV Enlargement. Where Is That Shunt?**
Naser M. Ammash, M.D.

2:00 p.m. **Echo in Postop Simple Congenital Heart Disease**
Crystal R. Bonnicksen, M.D.

2:30 p.m. **Echo in Postop Complex CHD**
Nathaniel W. Taggart, M.D.

Program Schedule

3:00 p.m. **Panel Discussion**
Drs. Bonnichsen and Taggart; Dr. Ammash, moderator

3:30 p.m. **Adjourn for the Afternoon**

Saturday, May 28, 2016

7:00 a.m. **Continental Breakfast**
Tennessee D Foyer

MORE VALVULAR AND SPECIAL TOPICS

Dr. Roger L. Click., presiding

7:30 a.m. **Echo for Aortic Prostheses**
Lori A. Blauwet, M.D.

8:00 a.m. **Cardiac Masses**
George M. Gura, Jr., M.D.

8:30 a.m. **Echo for Mitral Prostheses**
Lori A. Blauwet, M.D.

9:00 a.m. **3-D TEE – How To Get There**
Jeffrey B. Geske, M.D.

9:30 a.m. **Cases in Interventional Echo**
Drs. Ammash, Taggart, and Click

10:00 a.m. **Refreshment Break**

10:15 a.m. **Interesting Cases With Audience Interaction** (10 minutes each)
Victoria R. Jones, RDCS, Janell K. Fox, RCS, Pamela R. Burgess, RDCS, Dalane W. Kitzman, M.D., and Frederick W. Kremkau, Ph.D.

11:30 a.m. **Adjourn**

REGISTRATION

Register online:

celinks.mayo.edu/basicecho2016

Registration Fee:

Course Registration (MD, PhD, DO, PharmD)	\$740.00
Course Registration (Fellows in Training, Sono, RN)	\$560.00

Mayo Clinic Division of Cardiovascular Diseases implemented an online conference registration system in January 2012. If this is your first time using the online system, you will need to create a profile. The attendee's email address is required upon registration. A letter of confirmation and receipt will be forwarded to this email address upon receipt of submitted registration and payment. Present this letter when checking in at the meeting registration desk.

The registration fee includes tuition, electronic course syllabus, continental breakfasts, break refreshments, lunch, and reception.

Although it is not Division of Cardiovascular Diseases policy to limit the number of registrants for a course, conference room facilities may necessitate closing of enrollment; therefore, early registration is advised. Enrollment for this program is limited.

For additional information, contact:

Cardiovascular Continuing Education
200 First Street SW – Gonda 6-138
Rochester, MN 55905

E-mail: cvcme@mayo.edu

Phone: 800-283-6296 or 507-266-6703

Website: *celinks.mayo.edu/basicecho2016*

Cancellation Policy

If you cancel your participation in this course, your registration fee, less a \$75 administrative fee, will be refunded when written notification is received by Division of Cardiovascular Diseases before **Wednesday, May 11, 2016** (cvcme@mayo.edu or fax#: 507-266-7403). **No refunds will be made on or after Wednesday, May 11, 2016.** Canceled registrations are non-transferable.

Division of Cardiovascular Diseases reserves the right to cancel or postpone any course due to unforeseen circumstances. In the unlikely event Division of Cardiovascular Diseases must cancel or postpone this course, Division of Cardiovascular Diseases will refund the registration fee, but is not responsible for any related costs, charges, or expenses to participants, including fees assessed by airline/travel/lodging agencies.

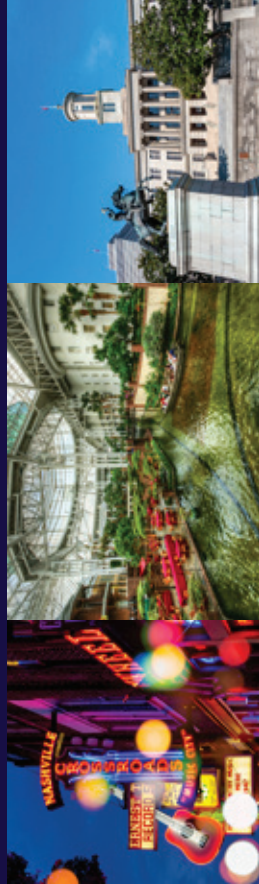
MAYO CLINIC

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