



Division of Cardiovascular Diseases

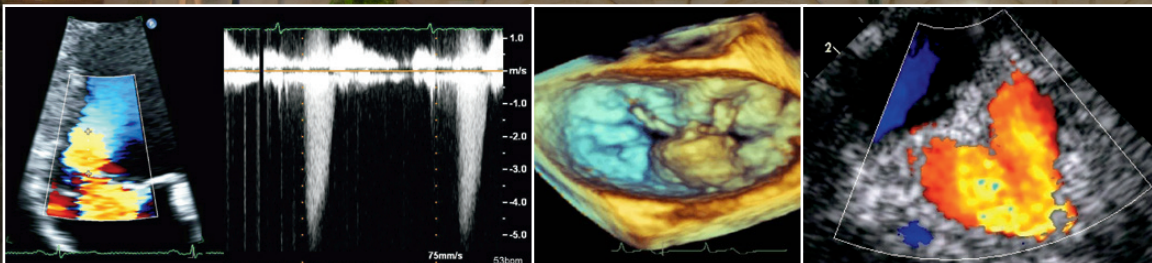
ECHOCARDIOGRAPHY in the Nation's Capital:

*Practical Review of Adult
Echocardiography for
Physicians and Sonographers*

May 8-10, 2015

Fairmont Washington, D.C., Georgetown

Course Directors:
Patricia A. Pellikka, M.D.
Sunil V. Mankad, M.D.



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www.mayo.edu/cme/nationscapital

COURSE DESCRIPTION

Echocardiography in the Nation's Capital is designed to provide a practical review of the current uses and limitations of two-dimensional echocardiography, Doppler, and color flow imaging in the assessment of adult myocardial, ischemic, pericardial, and valvular disease. Traditional topics in the field of echocardiography including assessment of systolic and diastolic function, quantitative Doppler, and stress echocardiography will be presented. In addition, newer techniques including 3D echo and strain imaging will be discussed.

Optional Educational Sessions:

The following sessions are intended to provide additional learning opportunities to participants. Space is limited and pre-registration is required. *Registration for these sessions is at the time of registration for the course.*

Friday, May 8 from 3:30-5:30 p.m. - 3-D Workshop Session

Hands-on session in which participants can crop and orientate 3D datasets with experienced staff and perform clinically relevant quantitative measurements. It is aimed at cardiologists and sonographers who want to introduce 3D echo in the daily practice.

Saturday, May 9 from 7:00-9:00 a.m. Early Bird Workshop Session

Option 1: Maintenance of Certification Learning Session

Option 2: Strain Imaging

COURSE LEARNING OBJECTIVES

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

- correlate the pathology and etiology of valvular heart disease;
- apply Doppler principles and hemodynamics to the assessment of valvular heart disease and the systematic assessment of prosthetic valves;
- utilize the proper technique for the assessment and clinical application of diastolic function of the heart;
- identify diastolic filling patterns found in various cardiac disorders;
- recognize pathology and echocardiographic findings of ischemic heart disease and mechanical complications of myocardial infarction
- discuss clinical applications of stress echocardiography;
- identify the two-dimensional and Doppler findings for pericardial disease; and
- recognize the potential of new technology in the field of echocardiography, including 3D imaging and strain imaging

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 designed for physicians and cardiac sonographers who perform and interpret echo exams and wish to enhance their knowledge of the echocardiographic assessment of adult cardiac disease. Participants with a basic knowledge of echocardiographic techniques and applications will benefit most from this program.

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 20.0 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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.

DATE AND LOCATION

Echocardiography in the Nation's Capital will be held **May 8-10, 2015**. The course will be held at the Fairmont Washington DC, Georgetown, 2401 M Street, NW, Washington, District of Columbia, 20037.

TRAVEL

The closest airports to Fairmont Washington, D.C., Georgetown are:

- Ronald Reagan Washington National Airport (DCA) - 5 miles/15 minutes
- Washington Dulles International Airport (IAD) - 26 miles/35 minutes
- Baltimore-Washington International Thurgood Marshall Airport (BWI) - 35 miles/45 minutes

Metro Subway (<http://www.wmata.com>) : Foggy Bottom or Dupont Circle Metro Station.

Travel arrangements are the sole responsibility of the individual registrant.

LODGING ACCOMMODATIONS

Guest rooms have been reserved for attendees and their guests with special course rates at the Fairmont Washington, D.C., Georgetown. In order to receive the special Fairmont room rate of \$249 per night, **reservations must be made before the room block is filled or before the expiration date of April 9, 2015, whichever comes first**. Reservations will be taken following this date based on space and rate availability. Please identify yourself as a participant of the Mayo Clinic Echo in the Nation's Capital when making your reservation.

The Fairmont Washington, D.C., Georgetown
2401 M Street, NW
Washington, District of Columbia, 20037
Email: washington@fairmont.com
Global Reservations Centre: (800) 441-1414
Website: www.fairmont.com/washington



Lodging arrangements are the sole responsibility of the individual registrant.

Mayo School of CPD 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

Parking at the Fairmont is available for a fee.

FACULTY

Course Directors

Patricia A. Pellikka, MD, FACC, FAHA, FACP, FASE

Professor of Medicine

Division of Cardiovascular Diseases

Director, Echocardiography Laboratory,

Mayo Clinic, Rochester, Minnesota

Sunil V. Mankad, MD, FACC, FASE, FCCP

Associate Professor of Medicine,

Division of Cardiovascular Diseases

Mayo Clinic, Rochester, Minnesota

Mayo Faculty

Crystal R. Bonnicksen, MD

Assistant Professor of Medicine

Division of Cardiovascular Diseases

Mayo Clinic, Rochester, Minnesota

Cathryn A. Harris, RDCS

Cardiac Sonographer

Mayo Clinic, Rochester, Minnesota

Joseph A. Dearani, MD

Professor of Surgery

Cardiovascular Surgery

Mayo Clinic, Rochester, Minnesota

Garvan C. Kane, MD, PhD, FAHA, FASE, FCCP

Associate Professor of Medicine

Division of Cardiovascular Diseases

Mayo Clinic, Rochester, Minnesota

Barry L. Karon, MD, FACC, FASE

Assistant Professor of Medicine

Division of Cardiovascular Diseases

Mayo Clinic, Rochester, Minnesota

Grace Lin, MD, FACC

Assistant Professor of Medicine

Division of Cardiovascular Diseases

Mayo Clinic, Rochester, Minnesota

Joseph F. Maalouf, MD, FACC

Professor of Medicine

Division of Cardiovascular Diseases

Mayo Clinic, Rochester, Minnesota

Joseph J. Maleszewski, MD, FACC

Associate Professor of Laboratory

Medicine/Pathology

Division of Anatomic Pathology

Mayo Clinic, Rochester, Minnesota

Vuyisile T. Nkomo, MD, FACC

Associate Professor of Medicine

Division of Cardiovascular Diseases

Mayo Clinic, Rochester, Minnesota

Sorin V. Pislaru, MD, PhD, FACC, FASE

Associate Professor of Medicine

Division of Cardiovascular Diseases

Mayo Clinic, Rochester, Minnesota

Guest Faculty

Steven A. Goldstein, MD, FACC, FASE

Director, Noninvasive Cardiology

Laboratory

Washington Hospital Center

Washington, DC

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.



Course Schedule

Friday, May 8, 2015

7:15 a.m. Registration – Continental Breakfast

7:55 a.m. Welcome and Course Overview
Course Directors

8:00 a.m. Orientation to the Audience Response System
and Knowledge Assessment

Assessment of Cardiac Function

Moderator: *Patricia A. Pellikka, M.D.*

8:15 a.m. Echocardiography for Assessment of Left Ventricular Systolic
Function: 2-D and 3-D Echo and Doppler
Crystal R. Bonnicksen, M.D.

8:40 a.m. Echocardiographic Assessment of Diastolic Function: Basic Concepts
and Practical Points
Barry L. Karon, M.D.

9:05 a.m. Echocardiographic Assessment of Right Heart Pressures and Right
Ventricular Function
Garvan C. Kane, M.D., Ph.D.

9:30 a.m. Strain Imaging for Assessment of Left and Right Ventricular Function
Grace Lin, M.D.

9:55 a.m. Panel Discussion
Drs. Bonnicksen, Karon, and Lin

10:15 a.m. Refreshment Break

Diastolic Function and Myocardial Disease

Moderator: *Sunil V. Mankad, M.D.*

10:35 a.m. Diastolic Function: Case Studies & Clinical Pearls
Steven A. Goldstein, M.D.

11:00 a.m. Echocardiographic Assessment for Patients with Cardiac Amyloid, Eosinophilic Endomyocardial Disease, and Primary Restrictive Cardiomyopathy
Grace Lin, M.D.

11:25 a.m. Heart Failure, Transplant, and LVADs: Role of Echocardiography
Barry L. Karon, M.D.

11:50 a.m. Echocardiography in Pericardial Disease and Constriction
Garvan C. Kane, M.D., Ph.D.

12:15 p.m. Panel Discussion
Drs. Mankad, Lin, Karon, and Kane

12:30 p.m. Lunch

Coronary Artery Disease

Moderator: *Patricia A. Pellikka, M.D.*

1:30 p.m. **ECHO EXTRA**
Challenges in Patients Referred for Assessment of Coronary Artery Disease
Cathryn A. Harris, R.D.C.S.

1:40 p.m. Stress Echo – Ischemic and Non-Ischemic Heart Disease
Patricia A. Pellikka, M.D.

2:05 p.m. Case Studies in Contrast Echocardiography
Steven A. Goldstein, M.D.

2:30 p.m. Echocardiography Cases: Mechanical Complications of Myocardial Infarction
Sunil V. Mankad, M.D.

2:55 p.m. Panel Discussion
Drs. Goldstein, Mankad, Pellikka, and Ms. Harris

3:15 p.m. Adjourn

3:30 – 5:30 p.m.

Optional – Hands on 3-D Workshop

Interactive Hands-on Computer Workstations. Space is Limited.

Pre-registration required at the time of registration.

Drs. Mankad, Maalouf, and Pislaru

Saturday, May 9, 2015

6:45 a.m. Continental Breakfast

7:00 –

Early Bird Workshop Sessions

Select session of interest to attend.

Pre-registration required at the time of registration.

1. Strain Imaging – *Drs. Lin and Kane*

2. MOC Module – *Drs. Karon, Pellikka, and Pislaru*

9:10 a.m. **ECHO EXTRA**
New Valve Guidelines – Top 5 Things to Know
Garvan C. Kane, M.D., Ph.D.

Valvular Heart Disease I

Moderator: *Patricia A. Pellikka, M.D.*

9:15 a.m. Echocardiography for Aortic Valve Stenosis: Comprehensive 2-D and Doppler Assessment
Patricia A. Pellikka, M.D.

9:40 a.m. Echocardiography for Mitral Stenosis
Sorin V. Pislaru M.D., Ph.D.

10:05 a.m. Echocardiography for Mitral Regurgitation Including Assessment with PISA
Vuyisile T. Nkomo, M.D.

10:30 a.m. Echocardiography for Aortic Regurgitation Including Assessment With Continuity Equation
Joseph F. Maalouf, M.D.

10:55 a.m. Assessment of Tricuspid Valve Regurgitation
Vuyisile T. Nkomo, M.D.

11:20 a.m. Panel Discussion
Drs. Pislaru, Nkomo, and Maalouf

11:45 a.m. Lunch

Valvular Heart Disease II

Moderator: *Sunil V. Mankad, M.D.*

12:45 p.m. **ECHO EXTRA**
Appropriate Use Criteria for Echo - *Sunil V. Mankad, M.D.*

1:00 p.m. Echocardiography for Prosthetic Valves
Sorin V. Pislaru M.D., Ph.D.

1:25 p.m. Which Valve for Which Patient
Joseph A. Dearani, M.D.

1:50 p.m. Pathology and Echo Features of Infective Endocarditis
Joseph J. Maleszewski, M.D. and Joseph F. Maalouf, M.D.

2:15 p.m. Panel Discussion
Drs. Pislaru, Dearani, Maleszewski, and Maalouf

2:30 p.m. Refreshment Break

2:45 – 3:20 & 3:25 - 4:00 p.m. (Rotate to 2 sessions)		
Session 1 – Roosevelt	Session 2 – Main Room	Session – Culpepper
Diastolic Function <i>Drs. Karon and Lin</i>	Valvular Heart Disease Cases <i>Drs. Nkomo and Pislaru</i>	Imaging Tips and Tricks – <i>Drs. Bonnicksen, Kane, and Ms. Harris</i>

4:00 p.m. Adjourn

Sunday, May 10, 2015

7:00 a.m. Continental Breakfast

Congenital Heart Disease and Special Topics

Moderator: *Sunil V. Mankad, M.D.*

7:30 a.m. **ECHO EXTRA**

Multimodality Imaging Cases

Sorin V. Pislaru, M.D., Ph.D.

7:45 a.m. What the Adult Cardiologist Needs to Know About
Congenital Heart Disease

Crystal R. Bonnicksen, M.D.

8:10 a.m. 3-D Echocardiography: Practical Applications

Sunil V. Mankad, M.D.

8:35 a.m. Controversies in Adult Congenital Screening & Follow-up

Crystal R. Bonnicksen, M.D.

9:00 a.m. Intraoperative Echocardiography: Cases Where Echo Made a
Difference

Vuyisile T. Nkomo, M.D.

9:25 a.m. Interventional Echo – Not TAVR

Joseph J. Maalouf, M.D.

9:50 a.m. Panel Discussion

Drs. Bonnicksen, Nkomo, Pislaru, and Maalouf

10:00 a.m. Refreshment Break

Special Topics

Moderator: *Patricia A. Pellikka, M.D.*

10:15 a.m. Knowledge Assessment

10:30 a.m. Imaging in TAVR

Joseph F. Maalouf, M.D.

10:55 a.m. Echocardiography for Patients with Hypertrophic Cardiomyopathy

Barry L. Karon, M.D.

11:20 a.m. Role of Cardiac Surgery for Patients with Hypertrophic
Cardiomyopathy

Joseph A. Dearani, M.D.

11:45 a.m. Cardiac Masses: Pathology and Echo Correlation

Joseph J. Maleszewski, M.D. and Patricia A. Pellikka, M.D.

12:10 p.m. Adjourn

Registration Information



Register online at:

www.mayo.edu/cme/nationscapital

Registration Fee:

Course Registration (MD, PhD, DO, PharmD)	\$725.00
Course Registration (Resident, NP, RN, Sonographer)	\$625.00

Mayo Clinic Division of Cardiology has implemented an online conference registration system. If this is your first time using the online system, you will need to create a profile and login account. Please note your login information for future registrations and access to program details.

Register by entering the web site listed above and click on **Register Now**. The system will step you through the profile and login process. An email address is required upon registration. A letter of confirmation will be forwarded to this address upon receipt of payment and submitted registration. Present this letter of confirmation when checking in at the meeting registration desk.

The registration fee includes tuition, electronic syllabus, continental breakfasts, break refreshments, and lunches. Although it is not Mayo School of Continuous Professional Development (CPD) policy to limit the number of registrants for a course, conference room facilities may necessitate closing of enrollment; therefore, early registration is advised.

For additional information, contact:

E-mail: cvcme@mayo.edu
Phone: 800-283-6296

Cardiovascular Continuing Education
200 First Street SW – Gonda 6-472
Rochester, MN 55905

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 Mayo Division of Cardiovascular Education before **April 24, 2015** (cvcme@mayo.edu or fax#: 507-538-0146). **No refunds will be made on or after April 24, 2015.** Canceled registrations are non-transferable.

Mayo School of CPD reserves the right to cancel or postpone any course due to unforeseen circumstances. In the unlikely event Mayo School of CPD must cancel or postpone this course, Mayo School of CPD 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.

NATIONAL PHYSICIAN PAYMENT TRANSPARENCY PROGRAM

Mayo Clinic College of Medicine complies with the requirements of the National Physician Payment Transparency Program OPEN PAYMENTS (Physician Payments Sunshine Act).

MAYO CLINIC
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Rochester, MN 55905

Echo CME Program

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FAIRMONT WASHINGTON, D.C., GEORGETOWN

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May 8-10, 2015



Course Description

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Highlights

- Illustrative Cases
- 3-D Imaging Workshop (Optional)
- Practical Review of Echo
- Valve Disease / TAVR
- Imaging Tricks
- Strain Imaging
- MOC Learning Session

Credit Offered

Mayo Clinic College of Medicine designates this live activity for a maximum of 20 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Register on-line:
www.mayo.edu/cme/nationscapital

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