

Mayo School of Continuous Professional Development

The 17th Annual
**Echocardiographic Workshop
on 2-D and Doppler
Echocardiography *at Vail***

March 7-11, 2010

**Vail Marriott
Vail, Colorado**

Program Directors:

George M. Gura, Jr., M.D. – Mayo Clinic

Thomas Ryan, M.D. – The Ohio State University

Faculty:

William F. Armstrong, M.D. – University of Michigan

Rick A. Nishimura, M.D. – Mayo Clinic

Michael H. Picard, M.D. – Massachusetts General Hospital

James D. Thomas, M.D. – The Cleveland Clinic

Carole A. Warnes, M.D. – Mayo Clinic



REGISTER ONLINE NOW!

<http://www.mayo.edu/cm/cardiology.html>

In Collaboration With: *The Ohio State University*



General Information

COURSE DESCRIPTION

This program will provide a comprehensive review of state-of-the-art 2-D, Doppler and transesophageal echocardiography with a strong emphasis on newer and more rapidly changing areas. The topics to be covered include diastology, ischemic heart disease, valvular heart disease, 3-D echo, application of TEE in clinical practice, cardiomyopathy, and resynchronization in heart failure. The role of echo relative to the newer imaging modalities will be discussed. There are also afternoon workshops on transesophageal echo, hemodynamics, and stress echo. The final workshop will include a series of clinical cases which will focus on integrating various imaging modalities to provide the highest quality of patient care. The course is designed for the clinician and sonographer who are actively involved in adult echocardiography and wish to gain additional practical experience in these specific areas. Daily reading sessions will provide the opportunity to interpret case studies and to compare and discuss diagnoses with the faculty. An integrated format combining theory and practice will be utilized. In the morning sessions, a traditional lecture series will present state-of-the-art information on selected topics. Application of the techniques to clinical practice will be emphasized. Lectures covering pertinent general cardiology topics, such as appropriateness criteria, will also be provided.

In the afternoon, attendees will have the opportunity to apply the lecture material in a workshop environment. A large number of cases will be presented, analyzed and discussed. Each afternoon, attendees will be able to participate in reading sessions, covering either transesophageal echo, stress echo, and hemodynamics.

A syllabus with lecture summaries and selective reprints will be available to each registered participant along with a major topic bibliography. Most handouts will also highlight the critical information required, with special emphasis of the most pertinent information contained in the presentation.

COURSE LEARNING OBJECTIVES

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

- Apply the techniques of transesophageal and stress (both exercise and pharmacologic) echocardiography
- Use echocardiographic and Doppler methods to assess hemodynamics and cardiac function
- Utilize echocardiographic information in clinical decision making
- Apply the technique of CRT to the care of patients with CHF
- Justify stress testing combined with the use of cardiac ultrasound
- Utilize echocardiography to determine which patients should be referred for surgery versus medical therapy for the treatment of cardiovascular disease

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

Cardiac sonographers; clinical cardiologists with interest in echocardiography, cardiology trainees; application specialists; surgeons, anesthesiologists, and physician echocardiographers.

CREDIT

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

College of Medicine, Mayo Clinic, designates this educational activity for a maximum of 19 *AMA PRA Category 1 Credits*[™]. Physicians should only claim credit commensurate with the extent of their participation in the activity.

General Information

EDUCATIONAL GRANTS

At the time of this printing, a complete listing of commercial supporters 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 breaks.

DATE AND LOCATION

The Echocardiographic Workshop on 2-D and Doppler conference will be held March 7-11, 2010. Course headquarters will be located in Vail Marriott, 715 West Lionshead Circle, Vail, CO 81657 in the Grand Ballroom on the lower level. Meeting site telephone: 970-476-4444 – Guest Fax: 970-476-1647.

REGISTRATION

To register online, visit <http://www.mayo.edu/cme/cardiology.html>, complete the attached registration form and return by mail or fax, or phone 800-323-2688 or 507-284-2509. The registration fee includes tuition, comprehensive course syllabus, continental breakfasts, break refreshments, and reception. 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. A letter of confirmation will be sent upon receipt of payment and completed registration form. Please present the confirmation letter when checking in at the meeting registration desk.

For additional information, contact:

Mayo School of CME
Plummer 2-60
200 First Street SW
Rochester, MN 55905

Website: www.mayo.edu/cme/cardiology.html
E-mail: cme@mayo.edu
Phone: 800-323-2688 or 507-284-2509
Fax: 507-284-0532

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 School of Continuous Professional Development before Monday, February 22, 2010 (fax#: 507-284-0532). No refunds will be made on or after Monday, February 22, 2010. Canceled registrations are non-transferable.

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

TRAVEL

Vail has a well-deserved reputation as the number one ski resort in the United States. Vail village is located 100 miles west of Denver along Interstate 70. Registrants may either fly to Denver's International Airport (DEN) and take the two and one-half hour drive to Vail or fly directly to Eagle County Airport (EGE) (approximately 35 miles away). Information on the options for transportation from Denver to Vail and from Eagle County to Vail will be provided on the website. A rental car is not necessary while staying in Vail. In addition to the outstanding alpine skiing, Vail in the winter also offers cross-country skiing, skating, snowmobiling, and excellent restaurants and shops. It is a superb family ski resort.

Travel arrangements are the sole responsibility of the individual registrant.

General Information

TRANSPORTATION

Special discounted transportation through Colorado Mountain Express has been arranged. To make your reservation, please call 800-525-6363 and ask for the special ECHO rate.

DISCOUNTED LIFT TICKETS

Lift tickets and rental equipment at reduced prices are available to the participants. The downhill slopes open from 8:30 a.m. to 3:30 p.m. on the largest ski resort in North America. A near equal mix of beginning, intermediate and advanced ski trails are available, and promotes an environment for safe family skiing. There are numerous cross-country ski trails available with groomed, double-set trails at the bottom and the top of the mountain in Vail and in Beaver Creek. The Vail Marriott Mountain Resort & Spa is located within a few short steps of the famous Vail Gondola and high speed lifts which transport skiers to breathtaking vistas at the top of Vail Mountain. The famous Vail back bowls have been significantly expanded.

Discounted lift tickets are available through www.ski.com or 800-950-9378. This group rate is good during the entire meeting to include Vail, Beaver Creek, Keystone and Breckenridge, however, must be purchased in advance. Discounted lift ticket forms are available on the website.

DISCOUNTED SKI RENTALS

Discounted rental equipment is available from Charter Sports which is located in the Vail Marriott Mountain Resort & Spa. Rental equipment forms are posted on the website.

LODGING ACCOMMODATIONS

The Vail Marriott guestrooms offer more living space in each room, fireplaces in some guestrooms, kitchenettes in suites, granite bathrooms with princess soaking tubs and fine wood appointments. The property also has a European Spa, indoor/outdoor pool & hot tubs, restaurant and bar. The symposium is scheduled at the beginning of the spring ski season at a time when snowfall is most plentiful, and near perfect skiing conditions are most likely to occur.

To secure your room at the Vail Marriott Mountain Resort & Spa, please call 800-648-0720 or 970-476-4444 and state that you are attending the ECHO program. The room rate is \$299 single/double a night. One- and two-bedroom condominiums are also available at an additional cost. When you make your reservation, please be sure to ask about any additional resort fees, early departure fees, or cancellation penalties. The resort room blocks are scheduled to be held until **Friday, February 12, 2010** but may be sold out before this date. All reservation requests will require a credit card guarantee. Full, non-refundable, amount of the anticipated revenue (room and tax) for the entire stay will be billed to the individual credit card 30 days prior to arrival. Personal checks, money orders or a valid major credit card will be needed for the deposit. If reservation is cancelled within 30 days prior to arrival, individual will forfeit the deposit for all nights reserved. This is a busy time in Vail, and if you intend to extend your stay or arrive early to include a family vacation, we would recommend early registration to secure room arrangements.

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 and its attractions, please refer to: <http://www.visitvailvalley.com/>

Mayo School of Continuous Professional Development is not responsible for expenses incurred by an individual who is not confirmed and for whom space is not available at

General Information

the meeting. Costs incurred by the registrant such as airline or hotel fees or penalties are the responsibility of the registrant.

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

FACULTY

Course Directors

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

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

Thomas Ryan, M.D., FACC, FASE

Professor of Medicine; Director, The Ohio State University Heart Center; John G. and Jeanne Bonnet McCoy Chair in Cardiovascular Medicine, Davis Heart & Lung Research Institute, Columbus, OH

Faculty

William F. Armstrong, M.D., FACC

Professor of Internal Medicine; Director, Echocardiography Laboratory, Associate Clinical Chief, Division of Cardiology; University of Michigan Health System, Ann Arbor, MI

Rick A. Nishimura, M.D., FACC

Judd and Mary Morris Leighton Professor of Cardiovascular Diseases; Professor of Medicine, Mayo Clinic; Consultant, Division of Cardiovascular Diseases and Internal Medicine, Mayo Clinic, Rochester, MN

Michael H. Picard, M.D., FACC, FAHA, FASE

Associate Professor, Harvard Medical School; Director, Clinical Echocardiography, Massachusetts General Hospital, Boston, MA

James D. Thomas, M.D., FACC, FAHA

Charles and Loraine Moore Chair in Cardiovascular Imaging; Professor of Medicine and Biomedical Engineering (OSU); Adjunct Professor of Biomedical Engineering (CWRU); Lead Scientist for Ultrasound at NASA; Cleveland Clinic Foundation, Cleveland, OH

Carole A. Warnes, M.D., FACC

Professor of Medicine, Mayo Clinic; Consultant, Division of Cardiovascular Diseases and Internal Medicine; Consultant, Section of Pediatric Cardiology; Director, Adult Congenital Heart Disease Clinic, Mayo Clinic, Rochester, MN

FACULTY DISCLOSURE

As a provider accredited by ACCME, College of Medicine, Mayo Clinic (Mayo School of CME) 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

SUNDAY, MARCH 7, 2010

- 5:00-6:00 p.m. **Registration** – Grand Ballroom Foyer, Lower Level
- 6:00-8:00 p.m. **Multiple Cases Dealing With the Application of Echocardiography to Clinical Cardiology**
Audience Response System will be used.
All Faculty

MONDAY, MARCH 8, 2010

- 6:30 a.m. **Registration and Continental Breakfast**
- 7:20-7:30 a.m. **Welcome and Introduction**
Drs. Gura and Ryan

ECHO IN HEART FAILURE

Dr. George M. Gura, Jr., presiding

- 7:30-7:55 a.m. **New Approaches to Assess Left Ventricular Function: What to Quantify and How**
Dr. James D. Thomas
- 7:55-8:20 a.m. **A Practical Approach to Diastolic Function: How Echo Guides Patient Management**
Dr. Thomas Ryan
- 8:20-8:45 a.m. **Advanced Heart Failure: Role of Echo in CRT, VADs, etc.**
Dr. William F. Armstrong
- 8:45-9:10 a.m. **Competitive Heart Failure Imaging: Echo vs the Other Modalities!**
Dr. Thomas Ryan
- 9:10-9:30 a.m. **Summary: A Clinician's Guide to Imaging Patients With Heart Failure**
Dr. Rick A. Nishimura
- 9:30-9:45 a.m. **Questions and Answers**
Drs. Thomas, Ryan, and Armstrong; Dr. Gura, moderator

WORKSHOPS

- 4:30-5:30 p.m. **Stress Echo Workshop. Multiple Cases Including Use of Dobutamine and Contrast**
Dr. Thomas Ryan
- 5:30-6:30 p.m. **Transesophageal Cases – Essential Application in Clinical Cardiology Including Infrequent But Life Threatening Complications**
Dr. George M. Gura, Jr.

TUESDAY, MARCH 9, 2010

7:00 a.m. Continental Breakfast

ECHO IN CORONARY ARTERY DISEASE

Dr. Thomas Ryan, presiding

7:30-7:55 a.m. **Complications of MI: Role of Echo in the ED and CCU**
Dr. George M. Gura, Jr.

7:55-8:20 a.m. **What's New in Stress Echo, Including Contrast, Appropriateness Criteria, etc.?**
Dr. Thomas Ryan

8:20-8:45 a.m. **Comparing Echo to Other Modalities for Patients With CAD**
Dr. James D. Thomas

8:45-9:10 a.m. **An Update on Contrast Echo: Rest and Stress**
Dr. William F. Armstrong

9:10-9:30 a.m. **TEE for Aortic Diseases**
Dr. George M. Gura, Jr.

9:30-9:45 a.m. **Questions and Answers**
Drs. Gura, Thomas, and Armstrong; Dr. Ryan, moderator

WORKSHOPS

4:30-5:30 p.m. **Basic and Advanced Hemodynamics of Valvular Heart Disease. Focus on Clinical Challenges in Aortic Valve Disease and Pump Dysfunction. Multiple Clinical Cases**
Dr. Rick A. Nishimura

5:30-6:30 p.m. **Illustrative Cases from the Mayo Clinic Adult Congenital Disease Clinic. Focus on Congenital Heart Disease Most Often Overlooked in a Adult Clinical Practice**
Dr. Carole A. Warnes

6:30-7:30 p.m. **Welcome Reception in Ballroom Foyer**
All Participants, Faculty, Exhibitors, and Guests Invited

WEDNESDAY, MARCH 10, 2010

7:00 a.m. Continental Breakfast

VALVULAR AND CONGENITAL HEART DISEASE

Dr. Rick A. Nishimura, presiding

7:30-7:55 a.m. **How Should We Quantify Valvular Regurgitation?**
Dr. Rick A. Nishimura

7:55-8:20 a.m. **Role of 3-D Echo in Valvular Heart Disease**
Dr. Michael H. Picard

8:20-8:45 a.m. **Imaging the New Valves: Stentless Valves, Role of Echo in Percutaneous Valves, etc.**
Dr. William F. Armstrong

- 8:45-9:10 a.m. **Endocarditis, Including Prosthetic Valves: Why Echo Is Indispensable**
Dr. George M. Gura, Jr.
- 9:10-9:30 a.m. **What We All Need to Know About Complex CHD**
Dr. Carole A. Warnes
- 9:30-9:45 a.m. **Questions and Answers**
Drs. Picard, Armstrong, Gura, and Warnes;
Dr. Nishimura, moderator

WORKSHOPS

- 4:30-5:30 p.m. **Hemodynamics Can Be Fun Including Mitral Valve Disease With Qualitative and Quantitative Measurements. Can Echocardiographic Results Reliably Predict Prognosis and Justify Surgery in Asymptomatic Patients**
Dr. James D. Thomas
- 5:30-6:30 p.m. **Heart Failure, Cardiomyopathies, and Resynchronization Therapy**
Drs. Michael H. Picard and William F. Armstrong

THURSDAY, MARCH 11, 2010

- 7:00 a.m. **Continental Breakfast**

MISCELLANEOUS TOPICS IN ECHO

Dr. Thomas Ryan, presiding

- 7:30-7:55 a.m. **Pericardial Diseases, Including Constriction/Restriction**
Dr. Carole A. Warnes
- 7:55-8:20 a.m. **New Approaches to Assessing the Right Heart**
Dr. James D. Thomas
- 8:20-8:45 a.m. **HCM - What Do You Need From Echo**
Dr. Rick A. Nishimura
- 8:45-9:10 a.m. **Echo-Guided Interventions: State-of-the-Art**
Dr. Michael H. Picard
- 9:10-9:30 a.m. **Health Care Reform and Cardiac Imaging: What's Happening!**
Dr. Michael H. Picard
- 9:30-9:45 a.m. **Questions and Answers**
Drs. Warnes, Thomas, Nishimura, and Picard; Dr. Ryan, moderator

WORKSHOP

- 4:30-6:00 p.m. **Challenging and Problematic Cases From the Faculty**
All Faculty
- 6:00-6:30 p.m. **Panel Discussion**
All Faculty
- 6:30 p.m. **Closing Remarks, Program Evaluation, CME Credits, and Adjournment**

Registration Form

2074

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Please direct questions to:

Mayo School of Continuous
Professional Development
200 1st Street SW /Plummer 2-60
Rochester, MN 55905

Phone: 800-323-2688

507-284-2509

Website: www.mayo.edu/cme/cardiology.html

E-mail: cme@mayo.edu

Register Online at: <http://www.mayo.edu/cme/cardiology.html>

(Please print or type all information. You may duplicate this form for multiple registrations.)

Name _____

First Name

Middle Name or Initial

Last Name

Degree MD DO PhD RN RCS RDCS Other _____

Institution _____


E-mail Address _____

Which is your preferred mailing address: Work/Business Home

Street address for the above selected mailing: _____

City _____ State/PV _____ ZIP/Postal Code _____ Country _____

Telephone (_____) _____ FAX (_____) _____

 If you need disability accommodations, please check here and advise us of your needs at least two weeks before the program. _____

Payment Received:

Early tuition received
on or before Feb. 22, 2010

Tuition received
after Feb. 22, 2010

Physician

\$750

\$825

Reduced Fee*

\$500

\$575

Fellow /Resident in Training

Resident

Nurse

Physician Assistant

Sonographer

Emeritus Staff

*Registrants in the **reduced fees** category are required to submit with the registration form proof of licensure, a business card, or a letter written on official letterhead and signed by a department supervisor verifying status.

One Day Fee (no refund for cancellations of one day)

\$250

\$325

Sunday

Monday

Tuesday

Wednesday

Thursday

P A Y M E N T

Payment must accompany application.

Check (payable to **Mayo Clinic (reference Vail Winter 2010)** in U.S. dollars drawn on a U.S. bank)

Credit Card (NOTE: American Express Not Accepted): Visa MasterCard Discover

Cardholder's Name _____

Card Number _____

V-Code (3 digits on back of credit card) _____

Expiration Date _____

Office Use Only:

Registration Received: _____ Entered: _____ Confirmation Mailed: _____



Mayo Clinic
200 First Street SW / GO-06-138SW
Rochester, MN 55905

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Echocardiography at Vail**

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*If you already received a copy of this
brochure, please give this brochure to
an interested colleague.*



In Collaboration With:
The Ohio State University



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<http://www.mayo.edu/cmecardiology.html>

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