ECHOCARDIOGRAPHY
in the Nation’s Capital

May 5-7, 2005

Hyatt Regency Washington on Capitol Hill
Washington, DC

Program Directors
Fletcher A. Miller, Jr., M.D., F.A.C.C., F.A.S.E.
Barry L. Karon, M.D., F.A.C.C., F.A.S.E.
Janel M. Mays, B.A., R.N., R.D.C.S.

Co-sponsored by:
American Society of Echocardiography
**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. Recent advances in the field of echocardiography including the assessment of systolic and diastolic function, quantitative Doppler, and stress echocardiography will be presented. The lectures will be illustrated with clinical case examples in echocardiography including an audience response system. Time has also been allowed for registrants to ask questions as well as interact closely with the course faculty.

All participants will have the opportunity to attend breakout sessions on Thursday and Friday. The additional hemodynamic breakout sessions will be conducted to allow participants the opportunity to apply the principles they are learning. The breakout sessions have been designed to meet the special needs of all participants with “Focus For Physicians” and “Focus For Sonographers”.

Participants will receive a comprehensive syllabus and hemodynamic guide for their future reference. Attendees are encouraged to bring their own calculators to maximize participation in the hemodynamic workshops.

**Course Objectives**

As a result of participating in this program, attendees will 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
- Develop an integrated approach to the assessment of valvular stenosis and valvular regurgitation
- Demonstrate current two-dimensional and Doppler methods to assess left ventricular systolic function
- 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 myocardial infarction and mechanical complications
- Discuss clinical applications of stress echocardiography
- Identify the two-dimensional and Doppler findings for pericardial disease
- Appreciate the potential of new technology in the field of echocardiography

**Who Should Attend**

This course is designed for either physicians or 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**

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

The American Society of Echocardiography designates this educational activity for a maximum of 18.25 category 1 credits toward the AMA Physician’s Recognition Award. Each physician should claim only the credits that he/she actually spent in the activity.

The American Society of Echocardiography adheres to ACCME Standards regarding industry support of continuing medical education. Disclosure of faculty and commercial support sponsor relationships, if any, will be made known at the symposium.
Date and Location

*Echo in the Nation’s Capital* will be held May 5-7, 2005. The program will be held at the Hyatt Regency Washington on Capitol Hill.

Registration

To register, complete the attached registration form and return by mail or fax. The registration fee includes tuition, comprehensive course syllabus, continental breakfasts, break refreshments, lunch and reception.

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.

Cancellation Policy

Your registration fee, less a $50 administrative fee, will be refunded when written notification is received before **April 15, 2005**. No refunds will be made after **April 15, 2005**.

Lodging Accommodations

A block of guestrooms have been reserved with special rates at the Hyatt Regency Washington on Capitol Hill.

**Hyatt Regency Washington on Capitol Hill**

<table>
<thead>
<tr>
<th>Address</th>
<th>Single Occupancy</th>
<th>Double Occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>400 New Jersey Avenue NW</td>
<td>$164</td>
<td>$189</td>
</tr>
<tr>
<td>Washington, D.C. 20001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To ensure accommodations and the discounted rate please make your reservations by **April 5, 2005**, and identify yourself as a participant of the *Echo in the Nation’s Capital* course. Reservations may be made by calling (800) 492-8823 or (800) 233-1234 or through the web-site at www.washingtonregency.hyatt.com. Please note, room block may be sold out prior to April 5, 2005.

Faculty

**Program Co-Directors**

**Fletcher A. Miller, Jr., M.D., F.A.C.C., FASE**
Consultant, Cardiovascular Diseases and Internal Medicine
Director, Echocardiography Laboratory
Professor of Medicine,
Mayo Clinic College of Medicine
Mayo Clinic, Rochester, Minnesota

**Janel M. Mays, B.A., R.N., R.D.C.S.**
Program Director, MSHS DMS Echocardiography Program
Assistant Professor of Medicine,
Mayo Clinic College of Medicine
Mayo Clinic, Rochester, Minnesota

**Barry L. Karon, M.D., F.A.C.C., FASE**
Consultant, Cardiovascular Diseases and Internal Medicine
Assistant Professor of Medicine,
Mayo Clinic College of Medicine
Mayo Clinic, Rochester, Minnesota

**Program Faculty**

**William D. Edwards, M.D.**
Consultant, Laboratory Medicine and Pathology
Professor of Medicine,
Mayo Clinic College of Pathology
Mayo Clinic, Rochester, Minnesota

**Robert B. McCully, M.D., F.A.C.C.**
Consultant, Cardiovascular Diseases and Internal Medicine
Associate Professor of Medicine,
Mayo Clinic College of Medicine
Mayo Clinic, Rochester, Minnesota

**Bruce K. Daniels, B.S., R.D.C.S., FASE**
Cardiac Sonographer
Instructor of Medicine,
Mayo Clinic College of Medicine
Mayo Clinic, Rochester, Minnesota

**Mary (Libby) Hagen, A.A., R.N., R.D.C.S.**
Lead Research Sonographer
Mayo Clinic, Rochester, Minnesota
Course Schedule

Thursday, May 5, 2005

7:15 a.m.  Registration – Continental Breakfast
8:00 a.m.  Welcome and Course Overview
            Course Directors
8:10 a.m.  Orientation to the Audience Response System

Focus on Valvular Heart Disease
8:20 a.m.  Doppler Hemodynamic Assessment: Principles, Formulae, and Calculations
            Bruce K. Daniels, B.S., R.D.C.S., FASE
8:45 a.m.  Pathology of Aortic and Mitral Stenosis
            William D. Edwards, M.D.
9:10 a.m.  Aortic and Mitral Stenosis: 2-D/Doppler Assessment and Quantitation of Severity
            Barry L. Karon, M.D., FASE
9:40 a.m.  Pathology of Right Heart Valves
            William D. Edwards, M.D.
10:05 a.m.  Echocardiographic Assessment of Tricuspid and Pulmonic Disease: Right Heart Pressures and Right Ventricular Function (RIMP)
            Janel M. Mays, B.A., R.N., R.D.C.S.
10:30 a.m.  Refreshment Break – Visit Exhibits
11:00 a.m. Breakout Session

<table>
<thead>
<tr>
<th>Focus For Physicians</th>
<th>Focus For Sonographers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to TEE</td>
<td>Multiple Windows for Aortic Stenosis</td>
</tr>
<tr>
<td>Hemodynamic Cases in Valvular Stenosis</td>
<td>Demonstration: Multiple Windows</td>
</tr>
<tr>
<td>• Low output AS</td>
<td>Hemodynamic Cases in Valvular Stenosis</td>
</tr>
<tr>
<td>• Stress testing for MS</td>
<td>• How to assess low output AS</td>
</tr>
<tr>
<td></td>
<td>• Stress testing for MS</td>
</tr>
<tr>
<td>Question and Answer</td>
<td>Question and Answer</td>
</tr>
</tbody>
</table>

12:15 p.m. Lunch
12:30 p.m. “Box Lunch Case Review Session: Valvular Heart Disease”
            Fletcher A. Miller, Jr., M.D., FASE
1:30 p.m.  Pathology of Aortic and Mitral Regurgitation and Endocarditis
            William D. Edwards, M.D.
2:00 p.m.  Mitral Regurgitation: Echocardiographic Assessment by 2-D and Doppler
            Libby Hagen, R.N., R.D.C.S.
2:25 p.m.  Aortic Regurgitation: Echocardiographic Assessment by 2-D and Doppler
            Robert B. McCully, M.D.
2:50 p.m.  Quantitative Assessment of Valvular Regurgitation
            Dr. Fletcher A. Miller, Jr., M.D., FASE
3:15 p.m.  Refreshment Break – Visit Exhibits
3:45 p.m.  **Breakout Session**  

<table>
<thead>
<tr>
<th>Focus For Physicians</th>
<th>Focus For Sonographers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment of Prosthetic Valves and Endocarditis</td>
<td>Echo Assessment of Prosthetic Valves and Endocarditis</td>
</tr>
<tr>
<td>Technical Tips for PISA</td>
<td>Technical Tips for PISA</td>
</tr>
<tr>
<td>Hemodynamic Cases in Valvular Regurgitation</td>
<td>Hemodynamic Cases in Valvular Regurgitation</td>
</tr>
<tr>
<td>• When to quantitate MR/AR</td>
<td>• PISA MR</td>
</tr>
<tr>
<td>• Pitfalls to watch for</td>
<td>• PISA AR</td>
</tr>
<tr>
<td>Question and Answer</td>
<td>Question and Answer</td>
</tr>
</tbody>
</table>

5:00 – 5:30 p.m.  **Welcome Reception**  
Special Evening Session (*Select one session*)

5:30 p.m.  **A**  
Quality Assurance: Cases From Mayo Clinic  
Echocardiography Laboratory  
*Barry L. Karon, M.D., FASE*

**B**  The Physics of Echocardiography: Artifacts, Doppler and More!  
*Bruce Daniels, B.S., R.D.C.S., FASE*

6:30 p.m.  **Adjournment**

**Friday, May 6, 2005**

7:00 a.m.  Continental Breakfast – Visit Exhibits

7:15 a.m.  “Early Bird Case Review Session: Myocardial Disease”  
*Barry L. Karon, M.D., FASE*

**Focus on Myocardial Disease**

8:00 a.m.  Assessment of Left Ventricular Systolic Function: 2-D and Doppler Parameters (Ejection Fraction, LV Volumes, Cardiac Output, LIMP)  
*Libby Hagen, A.A., R.N., R.D.C.S.*

8:25 a.m.  Echocardiographic Assessment of Diastolic Function: Basic Concepts, Practical Hints and Clinical Application  
*Fletcher A. Miller, Jr., M.D., FASE*

8:55 a.m.  Dilated Cardiomyopathy and Cardiac Transplant: 2-D and Doppler Assessment of Systolic and Diastolic Function  
*Bruce K. Daniels, B.S., R.D.C.S., FASE*

9:20 a.m.  Hypertrophic Cardiomyopathy: 2-D and Doppler Assessment of Systolic and Diastolic Function  
*Robert B. McCully, M.D.*

9:45 a.m.  Questions and Answers

10:00 a.m.  Refreshment Break – Visit Exhibit

10:30 a.m.  Restrictive Cardiomyopathy: 2-D and Doppler Assessment  
*Janel M. Mays, B.A., R.N., R.D.C.S.*

10:55 a.m.  Coronary Artery Anatomy and Myocardial Infarction Including Mechanical Complications of MI  
*William D. Edwards, M.D.*

11:20 a.m.  Echocardiographic Assessment of Myocardial Infarction and Related Mechanical Complications  
*Barry L. Karon, M.D., FASE*

11:45 a.m.  Lunch – Box Lunch
**Special Luncheon Panel Discussion**

**Safety for the Echo Lab: Prevention of Work-Related Musculoskeletal Disorders in Cardiac Sonographers**

*Fletcher A. Miller, Jr., M.D., FASE and Janel M. Mays, R.N., R.D.C.S.*

12:00 noon

**12:30 p.m. Breakout Session**

<table>
<thead>
<tr>
<th>Focus on Physicians</th>
<th>Focus on Sonographers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biventricular Pacing in</td>
<td>Technical Tips for Diastolic Function</td>
</tr>
<tr>
<td>Heart Failure</td>
<td></td>
</tr>
</tbody>
</table>

**Stress Echo Case Reviews**

<table>
<thead>
<tr>
<th>Grade I</th>
<th>Grade II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade III-IV</td>
<td>Grade III-IV</td>
</tr>
</tbody>
</table>

**Question and Answer**

2:00 p.m. Adjournment

**2:30 – 4:30 p.m. Optional Afternoon Special Session**

ICAEL Lab Accreditation Tutorial

*Presenter: Cassie Robbins, R.D.C.S., ICAEL Technical Manager*

**Saturday, May 7, 2005**

7:15 a.m. **Continental Breakfast – Visit Exhibits**

7:30 a.m. “Early Bird Case Review Session: Stress Echocardiography”

*Robert B. McCully, M.D.*

**Focus on Special Topics**

8:00 a.m. **Left Atrial Volumes: Technical Tips and Expanding Clinical Practice**

*Bruce K. Daniels, B.S., R.D.C.S., FASE and Barry L. Karon, M.D., FASE*

8:25 a.m. **New Technology: Strain and Strain Rate Imaging**

*Libby Hagen, A.A., R.N., R.D.C.S. and Fletcher A. Miller, Jr., M.D.*

8:55 a.m. **Cardiac Tamponade and Constriction: Echocardiographic Assessment by 2-D and Doppler**

*Janel M. Mays, B.A., R.N., R.D.C.S.*

9:20 a.m. **Echo Guided Pericardiocentesis**

*Robert B. McCully, M.D.*

9:35 a.m. **Potpourri of Cardiac Masses: Echo and Pathology Correlation**

*Fletcher A. Miller, Jr., M.D., FASE and William D. Edwards, M.D.*

10:05 a.m. **Questions and Answers**

10:20 a.m. **Refreshment Break**

10:50 a.m. **Echocardiography in Aortic Diseases**

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

11:15 a.m. **Atrial Septal Defects: Assessment by TTE, TEE and Intracardiac Echo (ICE)**

*Fletcher A. Miller, Jr., M.D., FASE*

11:45 a.m. **Closing Remarks and Return Course Evaluation**

12:00 p.m. Adjourn
Registration Form

ECHOCARDIOGRAPHY
in the Nation’s Capital

May 5 – 7, 2005

Fax or Mail form and payment to:
Mayo Clinic (ATTN: Deborah Feils)
200 1st Street SW; GO-6-138
Rochester, MN 55905

• Telephone: 507-266-0677 • Fax: 507-538-0146 • E-mail: cvcme@mayo.edu

Please print or type all information. Duplicate this form for multiple registrations.

Name___________________________________________________________________________

Institution______________________________________________________________________

☐ Home  ☐ Work Address__________________________________________________________

City__________________________  State___________  Zip_________________________

Telephone (______) _______________________  FAX (______) __________________________

E-mail__________________________________________________________________________

[ ] Check box if you have special accommodation needs. If so, please indicate your needs here:
__________________________________________________________________________

Special dietary needs:  [ ] Kosher  [ ] Vegetarian

Evening Workshop (select one)
☐ A   Quality Assurance: Cases From Mayo Clinic Echocardiography Laboratory
☐ B   The Physics of Echocardiography: Artifacts, Doppler and More!

☐ Yes, I will attend the FREE ICAEL Pre-conference Tutorial
Friday, May 6, 2005  2:30 – 4:30 p.m.

PAYMENT

Early tuition received on or before April 15, 2005

ASE Member $380
Nonmember $475

Total Amount Due: $ __________________

☐ Check enclosed (payable to Mayo Clinic)

Card number ___________________  Expiration date (mm/yy)

Signature ______________________  Date ______________________

Cancellation Policy

Your registration fee, less a $50 administrative fee, will be refunded when written notification is received before April 15, 2005. No refunds will be made after April 15, 2005.
ECHOCARDIOGRAPHY in the Nation’s Capital

May 5-7, 2005

Hyatt Regency Washington on Capitol Hill
Washington, DC

Register Today!

Co-sponsored by:
American Society of Echocardiography

© 2005, Mayo Press • Printed in U.S.A.
MC4111-14rev0105