

# The 19th Annual Echocardiographic Symposium at Vail

New Technologies, Live Scanning, and Clinical Decision Making



**Co-sponsored By:** American Society of Echocardiography and Mayo Clinic College of Medicine

**Presented At:** Vail Marriott Mountain Resort & Spa Vail, Colorado



American Society of Echocardiography **Program Directors:** 

George M. Gura, Jr., M.D., FACC Fletcher A. Miller, Jr., M.D., FACC, FASE, FAHA Jae K. Oh, M.D., FACC, FAHA

#### Mayo Clinic Faculty:

Christopher P. Appleton, M.D., FACC Charles J. Bruce, M.B., Ch.B., FACC Allison K. Cabalka, M.D., FACC Tishri A. Nelson, RDCS Thomas A. Orszulak, M.D.

**Guest Faculty:** Lawrence W. Gaul, M.D. Natesa G. Pandian, M.D., FACC

## **General Information**

#### Program

This four-day symposium is an intensive and comprehensive review of state-of-theart echocardiography to a wide variety of cardiovascular disorders and will have an emphasis on introduction of new technologies and how to use echocardiographic information for the care of our patients. This conference is specifically designed for adult cardiovascular specialists, internists, anesthesiologists, critical care physicians, and sonographers interested in the clinical application of echocardiography. The central location and presentation schedule are intended to allow the participants to balance the educational aspects of the program with a summertime family vacation in the beautiful Rocky Mountains. This symposium will stress the integration of all echocardiography techniques into the comprehensive ultrasound examination. Particular emphasis will include new technologies, Doppler hemodynamics, stress echocardiography, diastology, transesophageal echocardiography, and heart failure (myocardial and pericardial disease). There will be live scanning of patients with various CV disorders, which will be coordinated with Doctor Lawrence Gaul of the Vail Clinic. This session will emphasize the importance of comprehensive echocardiographic acquisition and management decision based on echocardiographic data.

There will be ample time each afternoon for the participant to enjoy a multitude of summertime activities in this picturesque and relaxing environment.

### **Teaching Material**

A syllabus with lecture summaries and selective reprints will be available to each registered participant along with separate handouts for the workshop sessions on basic and advanced Doppler hemodynamics will be supplied to each registrant.

### **Who Should Attend**

- Adult cardiovascular specialists
- Internists
- Sonographers interested in the current clinical application of echocardiography

### **Objectives**

Upon completion of this program, attendees should be able to -

- be familiar with new technologies of cardiac ultrasounds including 3-D, tissue Doppler imaging, and strain imaging;
- make routine calculations of intracardiac pressures and valve areas;
- discuss the technique and clinical application of stress echocardiography for CAD and valvular diseases;
- quantitatively assess Doppler and color flow images;
- integrate information from two-dimensional, spectral Doppler, color flow and tissue Doppler echocardiography for diagnosis and management of a wide variety of clinical cardiovascular problems, including diastolic function;
- cite the comprehensive application of cardiac ultrasound to a wide variety of acute cardiovascular disorders; and
- comprehend the surgical management of many common cardiac problems as assisted by the use of echocardiography.

# **General Information**

#### Fee

Early registration saves \$75 in each member category. See the application for details. Your registration fee includes the continental breakfasts, breaks, workbooks, social event and the syllabus. The deadline to register in advance is Monday, July 11. *After this date, you must register at the on-site rate.* 

In addition, there is a reduced fee for American Society of Echocardiography (ASE) members. If you are not currently a member and wish to become one, please refer to *www.asecho.org* 

### Cancellations

Because of advance planning requirements, a full refund will be given if you cancel in writing at least four weeks before the first day of the program. A full refund minus a \$75 processing fee will be given for written cancellations received fewer than four weeks before the first day of the program (Monday, June 27, 2005). No refund will be given for no-shows.

In the unlikely event that the program is canceled, course registration fees will be refunded, less a \$75 processing fee; however, the American Society of Echocardiography or Mayo Clinic College of Medicine are not responsible for any travel or hotel costs you may incur.

### 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 24.25 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.

### Location

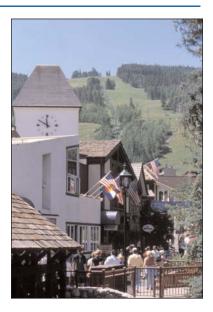
There are few places as beautiful and picturesque as the Rocky Mountains in the summertime. Vail is a unique family vacation spot and is safe and beautiful, as well as healthy, with numerous activities available. There are several golf courses, many tennis courts, ranches for horseback riding, and bicycle paths throughout the Vail community. River rafting, fishing, boating, gondola rides, hiking, wildflower tours, and nature walks are all immediately available. Shopping and dining facilities are unique. Many of the restaurants have reduced fares and offer reduced rates or two-for-one dinners during the summertime season. Vail is two hours from Denver and can be easily reached by van or limousine service. Upon registration for the program, you will receive information about shuttle service to and from the airport. Private transportation is usually not necessary in Vail as a free bus transportation system is operated by Vail Associates throughout the Vail Valley and extends to the Beaver Creek area.

## **General Information**

### Lodging

The Vail Marriott Mountain Resort & Spa completed a \$32 million dollar renovation in December 2002 offers a new kind of Marriott luxury for guests.

To secure your room at Vail Marriott Mountain Resort & Spa, please call 800-648-0720 or 970-476-4444 and state that you will be attending ASE Echo program. The room rate is \$165 single/double a night. Contact the Marriott to receive pricing on condominiums which are also available. When you make your reservation, please be sure to ask about any additional resort fees, early departure fees, or cancellation penalties. *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 the room arrangements.* Hotel reservations must be made by Thursday, June 23, 2005.



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

### **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 ASE rate.

### **Car Rental**

If you choose to rent a car while in Vail, Avis Rent A Car has been selected to provide discounted rates for this conference. Please call 800-331-1600 and refer to the Avis Worldwide Discount number of **D086845** to receive a discount off promotional rates.

### **Please Note**

Smoking is prohibited in all ASE meeting rooms.

### Acknowledgement

Appropriate acknowledgement will be given to all sponsors at the program.



# **Program Faculty**

### Faculty

Program Directors:	George M. Gura, Jr., M.D., FACC Associate Professor of Medicine, Mayo Clinic College of Medicine; Consultant, Division of Cardiovascular Diseases and Internal Medicine, Rochester, MN	
	<i>Fletcher A. Miller, Jr., M.D., FACC, FASE, FAHA</i> Professor of Medicine, Mayo Clinic College of Medicine; Consultant, Division of Cardiovascular Diseases and Internal Medicine; and Director, Cardiovascular Ultrasound Imaging and Hemodynamic Laboratory, Mayo Clinic, Rochester, MN	
	Jae K. Oh, M.D., FACC, FAHA Professor of Medicine, Mayo Clinic College of Medicine; Consultant, Division of Cardiovascular Diseases and Internal Medicine; and Co-Director, Cardiovascular Ultrasound Imaging and Hemodynamic Laboratory, Mayo Clinic, Rochester, MN	
Mayo Clinic Faculty:	<i>Christopher P. Appleton, M.D., FACC</i> Professor of Medicine, Mayo Clinic College of Medicine; Chair, Division of Cardiovascular Diseases and Internal Medicine, Mayo Clinic Scottsdale, Scottsdale, AZ	
	<i>Charles J. Bruce, M.B., Ch.B., FACC</i> Assistant Professor of Medicine, Mayo Clinic College of Medicine; Consultant, Division of Cardiovascular Diseases and Internal Medicine, Rochester, MN	
	<i>Allison K. Cabalka, M.D., FACC</i> Associate Professor of Pediatrics, Mayo Clinic College of Medicine; Consultant, Division of Pediatric Cardiology; Director, Training Program in Pediatric Cardiology, Rochester, MN	
	<i>Tishri A. Nelson, RDCS</i> Instructor in Medicine, Mayo Clinic College of Medicine; Clinical Sonographer, Cardiovascular Ultrasound Imaging and Hemodynamic Laboratory, Mayo Clinic, Rochester, MN	
	<i>Thomas A. Orszulak, M.D.</i> Professor of Surgery, Mayo Clinic College of Medicine; Consultant, Thoracic and Cardiovascular Surgery, Mayo Clinic, Rochester, MN	
Guest Faculty:	<i>Lawrence W. Gaul, M.D.</i> Aurora Denver Cardiology, Aurora, CO; Medical Director, ICU Vail Valley Medical Center, Vail, CO	
	<i>Natesa G. Pandian, M.D., FACC</i> Associate Professor of Medicine and Radiology, Tufts University School of Medicine; Director, Cardiovascular Imaging and Hemodynamic Laboratory, New England Medical Center, Boston, MA	

# **Program Schedule**

# The 19th Annual Echocardiographic Symposium at Vail

New Technologies, Live Scanning, and Clinical Decision Making

All sessions will be held at Vail Marriott Mountain Resort & Spa, 715 W. Lionshead Circle, Vail, CO. Meeting room is in the Grand Ballroom on the lower level. Meeting site telephone: 970-476-4444/FAX: 970-476-1647.

Views expressed in this program are those of the individual speaker and do not necessarily reflect views of the American Society of Echocardiography or Mayo Clinic College of Medicine.

### **MONDAY, JULY 25, 2005**

6:30 a.m.	Continental Breakfast
7:20 a.m.	Welcome and Course Objectives Dr. George M. Gura, Jr.

### NEW CLINICALLY IMPORTANT TECHNOLOGIES

Dr. Fletcher A. Miller, Jr., presiding

a.m. Tissue Doppler Imaging and Strain Imaging	
Clinical Applications and How to	
Dr. Christopher P. Appleton	
Evaluation of Mechanical Dyssynchrony.	
How to Perform and What Parameters Are Important	
Dr. Jae K. Oh	
3-D EchocardiographyHow to Incorporate Into Clinical Practice	
Dr. Natesa G. Pandian	
Hand-Carried Ultrasound	
Dr. Charles J. Bruce	
Panel Discussion	
Drs. Appleton, Oh, Pandian, and Bruce; Dr. Miller, moderator	
Refreshment Break – Visit Exhibits	

ECHOCARDIOGRAPHY IN HEART FAILURE

Dr. Jae K. Oh, presiding

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10:15 a.m.	Echo in Systolic Heart Failure: ACORN, Miracle, STICH, and MR Devices <i>Dr. Jae K. Oh</i>
10:45 a.m.	Biventricular Pacing: How to Identify Responders Dr. Charles J. Bruce
11:15 a.m.	Estimation of Filling PressuresE, E/Ea, Pulmonary Dr. Fletcher A. Miller, Jr.
11:45 a.m.	Cases and Discussions Drs. Oh and Bruce
12:30 p.m.	On Your Own – Free Time with Family and Friends
3:00 p.m.	SONOGRAPHER WORKSHOP – Ask Any Question on Echocardiographic Techniques Ms. Tishri A. Nelson and Dr. Fletcher A. Miller, Jr.
4:00 p.m.	HEMODYNAMIC WORKSHOP – Test Your Skills in Doppler Hemodynamic. Intracardiac Pressures, Gradients, Valve Areas, Continuity Equation, PISA Workbook #1 – Dr. Fletcher A. Miller, Jr.
6:00 p.m.	Adjournment
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# **Program Schedule**

## **TUESDAY, JULY 27, 2005**

7:00 a.m.	Continental Breakfast and Visit Exhibits
TRANSESO	PHAGEAL ECHOCARDIOGRAPHY
Dr. George M.	Gura, Jr., presiding
7:30 a.m.	Infective Endocarditis. When Do We Need TEE? The Recent Increase in Nosocomial Endocarditis <i>Dr. George M. Gura, Jr.</i>
7:55 a.m.	Aortic Dissection, Aortic Ulcer, and Intramural Hematoma. Is TEE the First Diagnostic Procedure of Choice? <i>Dr. Natesa G. Pandian</i>
8:20 a.m.	Source of Embolism and Intracardiac Mass. Can You Name the Tumor? <i>Dr. Charles J. Bruce</i>
8:50 a.m.	The Surgeon's Perspective – Use of Echo to Assist in Surgical Management of Endocarditis and Aortic Valve Disease <i>Dr. Thomas A. Orszulak</i>
9:30 a.m.	Cases and Discussion Drs. Pandian, Bruce, and Orszulak; Dr. Gura, presiding
10:00 a.m.	Refreshment Break – Visit Exhibits
CAD AND S	TRESS ECHOCARDIOGRAPHY
Dr. Fletcher A.	Miller, Jr., presiding
10:30 a.m.	Echo and Acute Coronary Syndrome – ICU and Complications of Myocardial Infarction <i>Dr. George M. Gura, Jr.</i>
10:55 a.m.	Exercise EchocardiographyWhen Is the Test Least Sensitive? Prognostic Values Dr. Charles J. Bruce
11:20 a.m.	Dobutamine Stress EchocardiographyDoes Contrast Help? How Is It Compared to Other Imaging Techniques for Myocardial Viability Test? <i>Dr. Fletcher A. Miller, Jr.</i>
11:45 a.m.	Contrast EchocardiographyCurrent Status Dr. Jae K. Oh
12:10 p.m.	Panel Discussion – Questions and Answers Drs. Gura, Bruce, and Oh; Dr. Miller, presiding
12:30 p.m.	On Your Own – Free Time with Family and Friends
2:00 p.m.	WORKSHOP
	Live Scanning Session for Patients With Valvular Heart Disease, Cardiomyopathy, Heart Failure, etc. <i>Drs. Gura, Miller, Oh, and Ms. Tishri A. Nelson</i> Introduction of Patients – <i>Dr. Lawrence Gaul of the Vail Clinic</i>
4:15 p.m.	WORKSHOP Interesting TEE Cases
5:15 p.m.	Dr. George M. Gura, Jr. Adjourn for Social Event at 4-Eagle Ranch
Print Printi	

## WEDNESDAY, JULY 28, 2005

7:00 a.m.	Continental Breakfast and Visit Exhibits
MYOCARD	IAL/PERICARDIAL DISEASE
Dr. Jae K. Oh	r, presiding
7:30 a.m.	Echocardiography for Patients. Restrictive Cardiomyopathies
	Including Cardiac Amyloid and ARVD
	Dr. Natesa G. Pandian

# **Program Schedule**

7:55 a.m.	Hypertrophic Cardiomyopathy – Assessment by 2-D and Doppler Diastolic Function and LVOT Gradients – Update on Alcohol Ablation Versus Myectomy and Pacing Dr. Christopher P. Appleton		
8:20 a.m.	Pericardial Effusion, Cardiac Tamponade, and Constriction: What Are the Most Sensitive Echo Parameters? Can You Send a Patient With Constriction to Surgery Based on Echocardiography? Dr. Jae K. Oh		
8:45 a.m.	Ischemic Mitral Regurgitation – Echocardiographic Features. Dr. George M. Gura, Jr.		
9:10 a.m.	The Surgeon's Perspective – Use of Echocardiography in Patients Undergoing Cardiac Surgery in Hypertrophic Cardiomyopathy, Pericardial Disease, and Ischemic Mitral Regurgitation. When Do You Need Intraoperative Echo? Dr. Thomas A. Orszulak		
9:45 a.m.	Panel Discussion		
10.00	Drs. Pandian, Appleton, Gura, and Orszulak; Dr. Oh, presiding		
10:00 a.m.	Refreshment Break – Visit Exhibits		
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0	. Gura, Jr., presiding		
10:30 a.m.	Prosthetic Valve Disease		
11.00	Dr. Fletcher A. Miller, Jr.		
11:00 a.m. Echo in ICU/ER Dr. George M. Gura, Jr.			
11:30 a.m.	Pericardial Disease and Systemic Disease Dr. Jae K. Oh		
12:00 p.m.	Echo for Prosthesis – Patient Mismatch Dr. Fletcher A. Miller, Jr.		
12:30 p.m.	On Your Own – Free Time with Family and Friends		
4:00 p.m.	WORKSHOP FOR DIASTOLOGY – Review of Diastolic Parameters, Clinical Applications Drs. Christopher P. Appleton and Jae K. Oh		
6:00 p.m.	Adjournment		

# THURSDAY, JULY 29, 2005

7:30 a.m.	Continental Breakfast and Visit Exhibits		
EVALUATIO	ON OF RIGHT HEART AND ADULT CONGENITAL HEART		
DISEASES			
Dr. Fletcher	A. Miller, Jr., presiding		
8:00 a.m.	Evaluation of Large Right Heart and Pulmonary Hypertension: Role of TDI for RV Function <i>Dr. Christopher P. Appleton</i>		
8:30 a.m.	ASD, VSD, and PDA, Bicuspid Valve, PS, Coarctation Dr. Allison K. Cabalka		
9:00 a.m.	Echo for Assessment of Tricuspid and Pulmonic Valves Dr. Fletcher A. Miller, Jr.		
9:30 a.m.	Echocardiography for Bicuspid Aortic Valve, Pulmonary Stenosis, and Coarctation Dr. Allison K. Cabalka		
10:00 a.m.	Adult Congenital Heart Disease Dr. Allison K. Cabalka		
10:30 a.m.	Closing Remarks, Program Evaluation, CME Credits, and Adjournment Dr. George M. Gura, Jr.		

# **Registration Form**

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New Technologies, Live Scanning, and Clinical Decision Making

### July 25-28, 2005

Mail Form and Payment To: Echo Vail, Ltd. Mayo Foundation Attn: Sheryl Dohrmann/Sheila Fick 200 1st Street SW/GO-06-138SW Rochester, MN 55905

Phone or Fax Application to:			
Telephone:	507-266-6703		
	507-284-0536		
Fax:	507-266-7403		
E-mail:	echocme@mayo.edu		

(Please print or type all information. Y	ou may duplicate this form	for multiple registration	ons.)
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Name  First Name	Middle Name or Initial	Last Name	
Degree MD DO PhD	RN RCS RDO	CS 🗌 Other	
Institution			
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least two weeks before the program			
Payment Received:	Early tuition received on or before July 11, 200		
Physician Member American		□ \$735	005
Society of Echocardiography	¢000	<u> </u>	
Physician Nonmember American Society of Echocardiography	\$760	\$835	
Reduced Fee*	\$480	\$555	
* 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. Reduced fee includes: Fellow/Resident in Training, Physician Assistant, Nurse, Sonographer, or Emeritus Staff.			
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P A Y	M E	N	1
Payment must accompany application.			
□ Check (payable to <b>Echo Vail, Ltd</b> in U.S. dollars drawn on a U.S. bank) □ Credit Card: □ Visa □ MasterCard □ Discover			
Cardholder's Name			
Card Number V-Code (3 digits on	back of credit card)	Expiration Date	



Mayo Clinic 200 First St. S.W./GO-06-138SV Rochester, MN 55905

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Vail Marriott Mountain Resort & Spa Vail, Colorado



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