6th Annual
Cardiovascular Ultrasound: From Pictures to Information
From Data to Information, From Information to Knowledge

October 15-19, 2008
PRESENTED AT:
Camelback Inn Marriott
Scottsdale, AZ

WORKSHOPS:
• Optimal Practices of Echocardiography – Contrast, 3-D, Tissue Doppler, Strain, Speckle
• CRT – Imaging, Implantation Simulation
• Telemonitoring in Heart Failure
• Basic and Advanced Hemodynamics
• Laboratory Accreditation
• 3-D Imaging

JOINTLY SPONSORED BY:
American Society of Echocardiography
UltraEcho, Ltd.

In Collaboration With:
Heart Rhythm Society and Mayo Clinic

MAYO CLINIC

PROGRAM DIRECTORS:
Bijoy K. Khandheria, M.D., FESC, FACC, FASE
David L. Hayes, M.D., FACC
Steven J. Lester, M.D., FACC, FRCP
Fletcher A. Miller, Jr., M.D., FACC, FAHA, FASE
Michael H. Picard, M.D., FACC, FASE
Luis R.P. Scott, M.D., FACC
James B. Seward, M.D., FACC, FASE
A. Jamil Tajik, M.D., FACC

Highlights for 2008
• Workstation Based Training on Optimal Practice of Cardiovascular Ultrasound
• Registry/Board Review
• Case-Based Approach to Valvular Heart Disease
• Symposium on Heart Failure, Resynchronization
• Mini Symposium on Right Heart, Pulmonary Hypertension
• Accreditation, Quality, Appropriateness
• Vascular Health
• Real-time 3-D Imaging: Obtaining Views, Incremental Value
WHO SHOULD ATTEND

Cardiologists
• Disease management – integrating cardiovascular ultrasound information in your practice – new and exciting percutaneous and surgical options for your patients with valvular heart disease
• Guidelines for valvular heart disease: what works, what does not work
• Utilization of remote monitoring for heart failure, arrhythmia

Internists Who Manage Patients With Valvular Heart Disease/Heart Failure
• Learn how to interpret reports on patients with valve disease, heart failure
• Learn when to order cardiovascular ultrasound

Echocardiologists and Sonographers
• Strengthen your skills in echocardiography – acquisition, interpretations, hemodynamics, calculations, coding, and reimbursement
• ICAEL accreditation
• Use of contrast agents for LVO
• Starting a vascular health program

Heart Rhythm Specialists
• Brush up implant skills
• Remote monitoring
• CRT and echocardiography

Lab Manager, Operations Managers
• Coding and reimbursement, quality, accreditation

In Training
• Cardiologists and Sonographers – hands-on learning on workstations
• Review for registry examination

Critical Care Specialists
• Sessions designed for Critical Care Specialists, Internists with large practice of heart failure, valvular heart disease

PROGRAM OVERVIEW

This 5 day course will emphasize the role of cardiovascular ultrasound in disease management. Teaching tools to be used will be didactic lectures, computer-based training, live case demonstrations, and small groups collaborating on case-based discussions. Focus will be on the role of cardiovascular imaging in heart failure, valvular heart disease, and atherosclerosis. In addition to this, there will be a special emphasis on cardiac resynchronization therapy with approaches to selection of patients, how to perform the implantation, and how to optimize the device in order to obtain the best results. Discussion of gaps in the knowledge of cardiac resynchronization along with future potential of this technique will also be discussed. Breakout groups will be scheduled to give in-depth knowledge of acquisition of data such as tissue Doppler, myocardial strain, and essential of diastolic function. Common errors will be highlighted and how to avoid these errors will be presented.

Unique to the program are sessions where the attendees can sit down on computer workstations and learn basic and advanced measurements in cardiovascular ultrasound including cIMT, strain, 3-D, and hemodynamics. Attendees will be able to work on basic 2-D measurements, valve quantification, strain, strain rate, and tissue velocity data for CRT. There will also be a workshop on vascular health in addition to workshops on coding and reimbursement as well as accreditation of laboratory. There will be discussion on what is an appropriate report. This will be one of the few CME programs to look at outcome-based education using workshop and simulation.
OBJECTIVES

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

• Apply 2-D, 3-D, Doppler, color flow, tissue Doppler, and strain rate imaging in different cardiovascular diseases
• Identify how to acquire and interpret strain rate imaging, tissue Doppler imaging information for application in cardiovascular pathologies
• Identify familiarity with procedures and potential limitations and applications associated with Doppler, color flow, tissue Doppler and strain rate imaging
• Distinguish the technique best suited to optimize biventricular pacing for resynchronization
• Employ knowledge on the use of echocardiographic procedures in heart failure
• Integrate information about the appropriate use of ventricular pacing in heart failure
• Identify findings from new trials in atrial fibrillation, sudden cardiac death
• Employ practice guidelines for AICD and role of echocardiography for ejection fraction calculation
• Learn techniques to obtain reliable systolic function measures critical to practice guidelines
• Evaluate the role of echocardiography in interventional procedures such as left atrial appendage occlusion, ablation, and ASD closure device
• Explain how to appropriately code for procedures
• Organize to accredit the laboratory
• Describe the process to maximize efficiency in the echocardiography laboratory
• Prepare on how to acquire and interpret 3-D echocardiography. Learn the use of 3-D echocardiography in clinical cardiology
• Integrate contrast enhanced imaging
• Prepare on use cardiovascular ultrasound for vascular health

FEE

Early registration saves $100 in each member category. See the application for details. Your registration fee will be confirmed by mail. Registration fee includes continental breakfasts, breaks, lunches, reception, and the syllabus. The deadline to register in advance is Monday, September 22, 2008. After this date, an on-site registration fee will apply.

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

Members of Heart Rhythm Society are also entitled to a discount on registration fees. If you are not currently a member and wish to become one, please refer to www.hrsonline.org

CANCELLATIONS

Because of advance planning requirements, a full refund will be given if you cancel in writing before Monday, September 22, 2008. A full refund minus a $100 processing fee will be given for written cancellations received after Monday, September 22, 2008. 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 $100 processing fee; however, the American Society of Echocardiography, UltraEcho, Ltd., Heart Rhythm Society, or Mayo Clinic are not responsible for any travel or hotel costs you may incur.
CREDIT
This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the American Society of Echocardiography and UltraEcho, Ltd. The American Society of Echocardiography is accredited by the ACCME to provide continuing medical education for physicians.

The American Society of Echocardiography designates this educational activity for a maximum of 37.25 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

ARDMS and CCI recognize ASE’s certificates and have agreed to honor the credit hours toward their registry requirements for sonographers.

The American Society of Echocardiography is committed to resolving all conflict of interest issues, and its mandate is to retain only those speakers with financial interests that can be reconciled with the goals and educational integrity of the educational program. Disclosure of faculty and commercial support sponsor relationships, if any, will be made known at the symposium.

LODGING
The Camelback Inn Marriott Resort, Golf Club & Spa (http://www.camelbackinn.com), is a Southwestern hacienda situated on 125 acres of landscaping unique to the Sonoran Desert just 20 minutes from the Phoenix Sky Harbor International Airport. In January 2004, Camelback Inn joined the world-class collection of JW Marriott Hotels & Resorts, the most distinctive and elegant hotels and resorts carrying the Marriott name. The resort has 453 oversize adobe-style casita guest rooms and suites. The Inn also features 36 holes of championship golf, children’s programs, tennis, basketball, restaurants, shops, and three heated swimming pools. The Spa at Camelback Inn recently underwent an $8 million renovation and features a new design as well as a full complement of spa offerings including 32 treatment rooms, state-of-the-art fitness center, spa pool, and Scottsdale’s only spa restaurant, Sprouts. Complimentary parking is included.

To secure your room at the Camelback Inn Marriott Resort, Golf Club & Spa, please call 800-242-2635 or 480-948-1700 and state that you will be attending the Echo program. The room rate is $262 single/double a night. The hotel room block is scheduled to be held until Monday, September 22, 2008 but may be sold out before this date. Therefore, we advise you to reserve your lodging as soon as possible and register for the program.

An on-line reservation can be made by referring to: http://marriott.com/property/propertypage/phxcb?groupCode=eccecca&app=resvlink. Use group code echecha. Make sure you receive a final confirmation number before exiting the reservation. If you encounter any problem, contact the above number.

When you make your reservation, please be sure to ask about any additional resort fees, early departure fees, or cancellation penalties.

For further information regarding the area and its attractions, please contact the Scottsdale Chamber of Commerce at 480-945-8481 or http://www.2chambers.com/scottsdale.htm

We encourage participation by all individuals. If you have a disability, advance notification of any special needs will help us better serve you.
TOP ATTRACTIONS
Sedona/Oak Creek Canyon
Grand Canyon (~1 of the 10 top wonders of the United States)
Scottsdale Fashion Square
Desert Botanical Garden
Old Town Scottsdale
Scottsdale ArtWalk

RESTAURANT RECOMMENDATIONS
Restaurant recommendations will be provided in your confirmation packets.

TRANSPORTATION
Arizona SuperShuttle is the primary transportation for this conference. Book online at www.supershuttle.com and enter your discount code: 4ZKKW. You will receive $4.00 off a roundtrip booked on-line. To book via phone, please call 800-258-3826 or 602-244-9000 once you have a confirmed flight.

Arizona International Airport to Camelback Resort:
• Claim your luggage.
• Proceed outside Baggage Claim at each terminal to sign marked “shared ride Van Service”.
• Provide your driver with the online confirmation number.

Arizona SuperShuttle from Hotel to Airport Directions:
• Be ready at your hotel designated shuttle/taxi pick up location.
• SuperShuttle will arrive within the 15 minutes of the pick up time selected when booked online.

CAR RENTAL
If you choose to rent a car while in Phoenix, 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. The group Avis Worldwide Discount number will automatically search for the lowest rate being offered at that time, guaranteeing the attendee the lowest rate possible with Avis. The group discount is available from 7 days before until 7 days after the event dates with unlimited free mileage.

Hertz car rental is also available on location at the hotel.

EDUCATIONAL GRANTS
This activity is supported in part by unrestricted educational grants from various commercial firms. At the time of printing, a complete list of supporters was not available. Appropriate acknowledgement of support will be provided at the time of the activity.

The following companies are recognized for their generous support of this educational activity with an unrestricted educational grant.

Platinum Sponsor: GE Healthcare
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General Information

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All sessions will be held at the Camelback Inn, A JW Marriott Resort, 5402 E. Lincoln Drive, Scottsdale, AZ 85253

The general session will be in the Arizona Ballroom, Salons F-I. Exhibits, breakfast, and breaks will be located in the Sunshine/Cholla Hall. Lunch will be held on the Sonoran Terrace.

Meeting site telephone: 480-948-1700 – Guest Fax: 480-951-8469

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

WEDNESDAY, OCTOBER 15, 2008

9:30 a.m. Registration – Arizona Registration Desk North

FOR THE REGISTRY AND BOARD

Intended Audience: Sonographers and Students in Sonography.

This session will cover topics dealing with physics of cardiovascular ultrasound including basic physics, Doppler ultrasound, and color flow imaging. Mock test. Caveman to High Rise in Cardiovascular Ultrasound

Elizabeth (Beth) Rodriguez, RDCS, presiding

10:00 a.m. Physics of Cardiovascular Ultrasound: Review for the Registry/Boards

Frederick W. Kremkau, Ph.D.

BACK TO THE FUTURE

Dr. Steven J. Lester, presiding

12:00 p.m. M-mode Echocardiography: Ancient Relic or Still Viable

What Can You Expect on Your Examination?

Itzhak Kronzon, M.D.

12:25 p.m. TTE and TEE: What You Need to Know for Boards and Practice

Steven A. Goldstein, M.D.

12:50 p.m. Panel Discussion

Drs. Kremkau, Kronzon, and Goldstein; Dr. Lester, moderator

1:00 p.m. Lunch – Enjoy the Sunshine – Sonoran Terrace

2:00 p.m. PUTTING THEORY INTO PRACTICE

Small group, breakout sessions. Participants will rotate to each classroom.

Intended Audience: Sonographers, Students in Sonography, Echocardiologists, Cardiovascular Trainees

These sessions are designed to provide small classroom environment wherein the instructors will give a didactic presentation with workbook and liberal case examples. There will be a self-assessment test at the end of each session.

ROOM A (Arizona Ballroom, Salons F-I)

2-D Echocardiography: Basic Chamber Quantification Measurements. ASE Guidelines and Optimal Practice of Cardiovascular Ultrasound Says…

This workshop will cover atria, ventricle, ventricular function, LV mass, aorta, and more.

Elizabeth (Beth) A. Rodriguez, RDCS and Susan Wilansky, M.D.
ROOM B (Peace Pipe)
Doppler Hemodynamics: Cornerstone of Cardiovascular Ultrasound. Stroke Volume, Cardiac Output, Cardiac Index, Pressure Gradients, \(dP/dt\), Valvular Regurgitation: Regurgitant Orifice Area, Regurgitant Volume. Valvular Stenosis: Aortic Stenosis, Mitral Stenosis
Ronald J. Buono, RDCS, RDMS, RVT and Hari P. Chaliki, M.D.

ROOM C (Arizona Ballroom, Salon E)
Mock Registry/Board Review
Physics of Ultrasound, M-mode, Doppler
Frederick W. Kremkau, Ph.D., Itzhak Kronzon, M.D., and Matt M. Umland, RDCS

5:00 p.m. Refreshment Break and Visit Exhibits

5:30 p.m. ADVANCED HEMODYNAMICS

ROOM A (Arizona Ballroom, Salon E)
Live Scanning + Workstation Based Cases
Fletcher A. Miller, Jr., M.D. and Matt M. Umland, RDCS

ROOM B (Arizona Ballroom, Salon M)
Evaluation of Right Heart. What to Measure, How to Measure, 2-D Versus 3-D, Doppler
Live Scanning + Workstation Based Cases
Krishnaswamy Chandrasekaran, M.D., Christopher J. Kramer, RDCS, and Marcin Murawski, RDCS

7:00 p.m. Adjourn

THURSDAY, OCTOBER 16, 2008

6:30 a.m. Continental Breakfast – Visit Exhibits

7:00 a.m. Cardiovascular Ultrasound: Review for the Registry Imaging Artifacts. Mock Test
Frederick W. Kremkau, Ph.D.

8:00 a.m. Welcome – Introduction to Course With Course Objectives
Bijoy K. Khandheria, M.D., David L. Hayes, M.D.,
Steven J. Lester, M.D., Fletcher A. Miller, Jr., M.D.,
Michael H. Picard, M.D., Luis R.P. Scott, M.D.,
James B. Seward, M.D., and A. Jamil Tajik, M.D.

VENTRICULAR FUNCTION IN HEALTH AND DISEASE. OPTIMAL PRACTICE OF CARDIOVASCULAR ULTRASOUND – IMAGING THE VENTRICLE
There will be liberal use of cases to illustrate technical tips.
Dr. Susan Wilansky, presiding

8:10 a.m. Special Lecture: Putting It into Perspective for the Imagers
Ventricular Function in Health and Disease. What Does a Clinician Want to Know About the Function of the Left Ventricle? What Should the Imager Provide for the Clinician? Is Qualitative Reporting Adequate? Where Is Torsion, Vortex… Going?
Robert O. Bonow, M.D.
OPTIMAL AND APPROPRIATE PRACTICE OF CARDIOVASCULAR ULTRASOUND – TECHNICAL PEARLS/QUALITY REPORTING
Dr. Susan Wilansky, presiding

8:30 a.m.  Left Ventricle: Coronary Anatomy and Segmental Wall Motion
           Alan S. Pearlman, M.D.

8:50 a.m.  Imaging the Right Ventricle: Standard and Non Standard Views.
           2-D and 3-D Ultrasound. Right Ventricular Function, Right Heart
           Itzhak Kronzon, M.D.

9:10 a.m.  Fundamentals of Contrast Enhanced Imaging of the Left Ventricle
           – Microbubble Composition, Mechanical Index, Power Settings,
           Dosing, Administration, Safety. Black Box Warning.
           Steven J. Lester, M.D.

9:30 a.m.  Quality in Cardiovascular Ultrasound – What Constitutes an Optimal
           Report for Ventricular Function? When Is It Appropriate to Use
           Echocardiography in Evaluation of Ventricular Function.
           Meeting the Standard and Exceeding Expectations.
           Michael H. Picard, M.D.

9:50 a.m.  Panel Discussion
           Drs. Pearlman, Kronzon, Lester, and Picard; Dr. Wilansky, moderator

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

MYOCARDIAL AND PERICARDIAL DISEASE
Dr. Fletcher A. Miller, Jr., presiding

10:30 a.m. Diagnosis and Management of Constrictive Pericarditis 2008
           A. Jamil Tajik, M.D.

10:50 a.m. Hypertrophic Cardiomyopathy 2008
           Harry Rakowski, M.D.

11:10 a.m. Case Studies
           Variants of HOCM
           Fletcher A. Miller, Jr., M.D.

STRESS ECHOCARDIOGRAPHY: TECHNIQUE, IMPROVING ACCURACY
Use of Myocardial Imaging and Contrast Enhanced Imaging
Dr. Fletcher A. Miller, Jr., presiding

11:40 a.m. Complications of Myocardial Infarction. Seminal Role Played by
           Echocardiography. Illustrative Examples
           Roger L. Click, M.D., Ph.D.

12:00 p.m. Athlete Heart: How Does One Use Cardiovascular Ultrasound to
           Differentiate From HOCM and Hypertrophy?
           Malissa J. Wood, M.D.

12:20 p.m. Vascular Health and the Athlete
           Robert (Todd) T. Hurst, M.D.

12:40 p.m. Panel Discussion
           Drs. Click, Wood, and Hurst; Dr. Miller, moderator
1:00 p.m.  Adjourn – Enjoy the Afternoon – Golf, Shop, Swim, Tour, Siesta!

5:00 p.m.  **SUNSET SPECIAL**
Small group, breakout sessions. Participants will rotate to each classroom.

**Intended Audience:** Sonographers, Students in Sonography, Echocardiologists, Cardiovascular Trainees
These sessions are designed to provide small classroom environment wherein the instructors will give a didactic presentation followed by practical, hands-on series of case examples on workstations. Participants will be able to do calculations, measurements on workstations loaded with cases. There will be a self-assessment test at the end of each session.

**ROOM A (Arizona Ballroom, Salon J)**
Sit down on computer terminals, work through cases.
*Rochelle (Shelly) Tyler, RDCS and Ronald J. Buono, RDCS, RDMS, RVT*

**ROOM B (Arizona Ballroom, Salon E)**
Sit down in front of computer terminals, work through cases.
*Partho P. Sengupta, MBBS*
*Sue Phillip, RCS, Glenn R. Lie, BSc, and Tricia Eshelman, RDCS*

**ROOM C (Arizona Ballroom, Salon M)**
Normal, Abnormal, Clinical Scenario Where It Adds Value.
Sit down in front of computer terminals, work through cases.
*Mani A. Vannan, MBBS*
*Patricia Keller, RDCS, Kevin Petruy, RDCS, RVT, and Mauro Vela, RDCS*

8:00 p.m.  Adjourn

8:00-9:00 p.m.  **Welcome Reception** – Buffet Dinner
All Participants, Faculty, and Guests Invited
Location: Sonoran Terrace

**FRIDAY, OCTOBER 17, 2008**

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

**VALVULAR HEART DISEASE**
*Dr. Bijoy K. Khandheria, presiding*

**Epidemiology**
7:45 a.m.  Epidemic of Valvular Heart Disease Is Upon Us. The Bare Facts
*A. Jamil Tajik, M.D.*

**Clinical Corner**
8:05 a.m.  The Dilemma. Asymptomatic 45-Year-Old Cardiologist, MVP, Severe MR. Operate or Not to Operate. What Is Appropriate Use of Echocardiography? ACC/AHA Guidelines Say…
*Robert O. Bonow, M.D.*
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<tr>
<td>8:45 a.m.</td>
<td>Severe Aortic Stenosis. Do I Operate or Do I Not Operate? What Is the Optimum Follow-up? What Do I Do? Bijoy K. Khandheria, M.D.</td>
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<td>9:05 a.m.</td>
<td>Panel Discussion</td>
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<td>Drs. Tajik, Bonow, and Chaliki; Dr. Khandheria, moderator</td>
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**TRICUSPID VALVE ENDOCARDITIS**  
*Dr. Alan S. Pearlman, presiding*

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<tr>
<td>9:15 a.m.</td>
<td>Tricuspid Valve 2-D and 3-D Evaluation. Case Examples</td>
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<td>James B. Seward, M.D.</td>
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<td>9:35 a.m.</td>
<td>Memorable 2-D and 3-D Cases of Infective and Noninfective Endocarditis</td>
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<td>Krishnaswamy Chandrasekaran, M.D.</td>
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<td>9:55 a.m.</td>
<td>Endocarditis Prophylaxis: New Guidelines</td>
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<td>Robert O. Bonow, M.D.</td>
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**OPTIMAL PRACTICE OF CARDIOVASCULAR ULTRASOUND – TECHNICAL PEARLS**  
*Dr. James B. Seward, presiding*

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<td>10:45 a.m.</td>
<td>Quantification of Severity of AS. Valve Area/Mean Gradient/Peak/Gradient Pitfalls in Doppler Calculation of Valve Area. How to Establish Severity When the Patient Has Atrial Fibrillation With Rapid Ventricular Response or No Parasternal Images. When and How Accurate Is TEE Planimetry of Aortic Valve. Is It Appropriate to Perform Annual Echocardiographic Examination? What Is a Complete, Concise and Understandable Report? Bijoy K. Khandheria, M.D.</td>
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<tr>
<td>11:05 a.m.</td>
<td>Morphologic Variants of Aortic Valve Disease</td>
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<td>James B. Seward, M.D.</td>
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**Illustrative Cases**

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<td>11:25 a.m.</td>
<td>55-Year-Old Farmer. Huffing and Puffing. NYHA Class III. Low Cardiac Outpatient Mean Gradient Is 10 mm Hg. Valve Area Is 0.7 cm2. The Challenge – To Operate or Not to Operate. How Can I Predict Outcome? Robert (Todd) T. Hurst, M.D.</td>
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<td>11:35 a.m.</td>
<td>Subaortic Ridge – Examples, Frequency, Treatment</td>
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<td>Steven A. Goldstein, M.D.</td>
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<tr>
<td>11:45 a.m.</td>
<td>Stump the Expert</td>
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11:55 a.m.  Etiology of Aortic Regurgitation  
Pathology of the Aortic Valve – Hari P. Chaliki, M.D.  
Pathology of the Aorta – Alan S. Pearlman, M.D.

12:15 p.m.  Lunch – Sonoran Terrace

OPTIMAL PRACTICE OF ECHOCARDIOGRAPHY – TECHNICAL PEARLS, REPORTING, COMMUNICATING  
Dr. Hari P. Chaliki, presiding

1:15 p.m.  Mitral Stenosis: How to Quantify Severity? Planimetry, Doppler.  
When Does Doppler Not Work? What Is the Role of Exercise Hemodynamics? What Constitutes a Complete Report?  
Steven A. Goldstein, M.D.

1:35 p.m.  Unusual Causes of Mitral Stenosis – Rapid Fire Cases.  
Supravalvular Stenosing Ring – Fletcher A. Miller, Jr., M.D.  
Annular Calcification and the Mitral Valve – Itzhak Kronzon, M.D.

1:55 p.m.  Mitral Valve Pathoanatomy, Quantification of Mitral Regurgitation  
Michael H. Picard, M.D.

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

2:35 p.m.  Panel Discussion  
Drs. Goldstein, Miller, and Picard; Dr. Chaliki, moderator

CARDIOVASCULAR PERFORMANCE – HEART HEALTH  
Dr. Robert (Todd) T. Hurst, presiding

2:45 p.m.  Cardiovascular Health – Why? In Whom?  
Robert (Todd) T. Hurst, M.D.

3:05 p.m.  Carotid IMT – Easy as It Sounds, Valuable as It Is Stated  
Steven J. Lester, M.D.

3:25 p.m.  Refreshment Break – Visit Exhibits

3:45 p.m.  BREAKOUT SESSIONS ON WORKSTATIONS  
Small group, breakout sessions. Participants will rotate to each classroom.  
Intended Audience: Sonographers, Students in Sonography, Echocardiologists, Cardiovascular Trainees  
These sessions are designed to provide small classroom environment wherein the instructors will give a didactic presentation followed by practical, hands-on series of case examples on workstations. Participants will be able to do calculations, measurements on workstations loaded with cases. There will be a self-assessment test at the end of each session.

ROOM A (Arizona Ballroom, Salon J)  
Carotid IMT – Live Demonstration on Acquisition, Measurement, Interpretation  
Robert (Todd) T. Hurst, M.D. and Christopher (Chris) B. Kendall, RDCS
PROGRAM SCHEDULE

ROOM B (Arizona Ballroom, Salon E)
Valvular Stenosis, Valvular Regurgitation – Live Demonstration and Workstations
Krishnaswamy Chandrasekaran, M.D., Hyun S. Yang, M.D., Ph.D., Tahlil A. Warsame, RDCS, and Marcin Murawski, RDCS

SPECIAL SYMPOSIUM: CONTRAST ENHANCED IMAGING: 2008 AND BEYOND
Dr. Steven J. Lester, presiding

5:45 p.m. Setting Up the Laboratory: IV, Agent, Reimbursement – the Nitty Gritty
Location: Arizona Ballroom, Salon F-I
Malissa J. Wood, M.D.

Examples of Contrast Enhanced Imaging on Workstations
Location: Arizona Ballroom, Salon J
Steven A. Goldstein, M.D., Mani A. Vannan, MBBS, and Ronald J. Buono, RDCS, RDMS, RVT

6:45 p.m. Adjourn

SATURDAY, OCTOBER 18, 2008

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

HEART FAILURE
Dr. Radha S. Gopalan, presiding

Clinician Corner
7:30 a.m. Heart Failure: What Does a Clinical Cardiologist Expect From the Imager? What Is the Role of Torsion?
Patrick T. O’Gara, M.D.

7:55 a.m. Medical Therapy for Heart Failure. State-of-the-Art 2008
Robert L. Scott, M.D., Ph.D.

8:15 a.m. When Drugs Fail – Cardiac Resynchronization Therapy: State-of-the-Art 2008
David L. Hayes, M.D.

8:45 a.m. Surgical Approaches to Treatment of Ventricular Dysfunction: Destination Therapy, Cardiac Transplantation, VAD
Francisco A. Arabia, M.D.

9:05 a.m. Sudden Cardiac Death – How Often? How to Treat? Better Yet, How to Prevent
Arshad Jahangir, M.D.

9:25 a.m. Panel Discussion
Drs. O’Gara, Scott, Hayes, Arabia, and Jahangir; Dr. Gopalan, moderator

9:35 a.m. Refreshment Break – Visit Exhibits

HEART FAILURE WITH NORMAL SYSTOLIC FUNCTION
Dr. Robert L. Scott, presiding

10:00 a.m. Heart Failure With Normal Systolic Function: Myth or Reality
Robert O. Bonow, M.D.
10:20 a.m. Myocardial Form Follows Function: New Concepts for Quantification of Myocardial Function
Partho P. Sengupta, MBBS

10:40 a.m. How Do I Evaluate Torsion, Twist, Vortex. Clinical Examples
Step-by-Step Methods
Partho P. Sengupta, MBBS

11:00 a.m. Echo Physiologist: New Approach to Evaluation of the Cardiovascular Function
James B. Seward, M.D.

11:20 a.m. Panel Discussion
Drs. Bonow, Sengupta, and Seward; Dr. Scott, moderator

SYMPOSIUM: ECHOCARDIOGRAPHY AND CARDIAC RESYNCHRONIZATION
Dr. Koomandor Srivathsan, presiding

11:40 a.m. CRT and Echocardiography: State-of-the-Art 2008
PROSPECT and Beyond PROSPECT
Jeroen J. Bax, M.D., Ph.D.

12:00 p.m. M-mode, 2-D, 3-D, Doppler for Evaluation of Dyssynchrony
Steven J. Lester, M.D.

12:20 p.m. Myocardial Imaging (Doppler, Vector Velocity, Speckle) for Evaluation for Dyssynchrony
Theodore P. Abraham, M.D.

12:40 p.m. Is Evaluation of Viability Essential Prior to Consideration of CRT?
If So, How Best to Do This?
Jeroen J. Bax, M.D., Ph.D.

1:00 p.m. Panel Discussion
Drs. Bax and Abraham; Dr. Srivathsan, moderator

1:10 p.m. Lunch – Sonoran Terrace

2:10 p.m. LIVE DEMONSTRATIONS

ROOM A (Arizona Ballroom, Salons F-I)
CRT: Optimization Methodologies
David L. Hayes, M.D., Luis R.P. Scott, M.D., Patricia Keller, RDGS, and Linda B. Osborn, RN

ROOM B (Arizona Ballroom, Salon J)
CRT: Patient Selection
Jeroen J. Bax, M.D., Ph.D., Sue Phillips, RCS, Glenn R. Lie BSc, and Tricia Eshelman, RDGS

4:10 p.m. Refreshment Break – Visit Exhibits

4:30 p.m. BREAKOUT SESSIONS ON WORKSTATIONS
Small group, breakout sessions. Participants will rotate to each classroom.
Intended Audience: Sonographers, Students in Sonography, Echocardiologists, Cardiovascular Trainees
These sessions are designed to provide small classroom environment wherein the instructors will give a didactic presentation followed by practical, hands-on series of case examples on workstations.
Participants will be able to do calculations, measurements on workstations loaded with cases.

**ROOM A** (Arizona Ballroom, Salon E)
CRT: What to Measure, Where to Measure, How to Measure
Theodore P. Abraham, M.D., Steven J. Lester, M.D., Jeroen J. Bax, M.D., Ph.D., and Christopher J. Kramer, RDCS

ROOM B (Arizona Ballroom, Salons F-I)
Telemonitoring for Heart Failure: How to Interpret
David L. Hayes, M.D. Luis R.P. Scott, M.D., and Linda B. Osborn, RN

6:30 p.m. Adjourn

**SUNDAY, OCTOBER 19, 2008**

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

7:30 a.m. **SPECIAL SESSION**
ICAEL: How Do You Get Your Laboratory Accredited?
Beverly L. Gorman, RDCS

**PULMONARY HYPERTENSION: 2008**
*Dr. Robert L. Scott, presiding*

8:30 a.m. How Do I Evaluate a Patient With Pulmonary Hypertension?
Radha S. Gopalan, M.D.

8:50 a.m. Treatment of Pulmonary Hypertension 2008
Robert L. Scott, M.D.

**SURGICAL APPROACHES AND INTRAOPERATIVE ECHOCARDIOGRAPHY**
*Dr. Roger L. Click, presiding*

9:10 a.m. Mitral Regurgitation and Ischemic Heart Disease. Do All Valves Require Repair? Is It the Valve or the Ventricle? How Do I Employ Intraoperative Echocardiography
David H. Adams, M.D.

9:30 a.m. Ventricular Assist Device, Total Artificial Heart. Appropriate Indications
Francisco A. Arabia, M.D.

9:50 a.m. Echocardiographer and VAD, Total Artificial Heart
Krishnaswamy Chandrasekaran, M.D.

10:10 a.m. Mitral Valve Repair: Can I Do Without Intraoperative Echo? Anatomy From the Surgeon. What Do I Need?
David H. Adams, M.D.

10:30 a.m. Intraoperative Echocardiography: Case Studies
Roger L. Click, M.D., Ph.D.

11:00 a.m. Panel Discussion
Drs. Adams, Arabia, and Chandrasekaran; Dr. Click, moderator

11:10 a.m. Cases From the Files of Mayo Clinic
Susan Wilansky, M.D. and Roger L. Click, M.D., Ph.D.

11:55 a.m. Closing Remarks, Program Evaluations, CME Credits, Adjournment
If you are unable to attend this conference, please join us at one of the upcoming courses:

The Beat Goes On… Updates in Cardiology  
August 8-10, 2008  
Sedona, AZ

The Beat Goes On  
September 25-28, 2008  
Orlando, FL

ePIC: Excellence in the Practice of Cardiovascular Ultrasound  
October 2-5, 2008  
Rancho Mirage, CA

The Heart Beat of Cardiology: From Stethoscope to Echoscope  
December 11-13, 2008  
Chicago, IL

Echo Hawaii  
January 26-30, 2009  
Big Island, HI

State-of-the-Art Echocardiography  
February 15-19, 2009  
Phoenix, AZ

Cardiology at Cancun  
February 23-27, 2009  
Cancun, Mexico

Team Echocardiography  
April 23-26, 2009  
Hilton Head Island, SC

Sights and Sounds in the Big Apple  
May 21-24, 2009  
New York, NY
Registration Form

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October 15-19, 2008

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200 1st Street SW/GO6-138SW
Rochester, MN 55905

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Fax: 507-266-7403
On-line Registration: www.asecho.org

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