

# SIGHTS AND SOUNDS OF ECHOCARDIOGRAPHY

in the Heart of the Big Apple

Case Based Learning of Echocardiography MAY 21-24, 2009



#### Presented at:

New York Marriott Marquis

# **New York, NY**

#### **Program Directors:**

Itzhak Kronzon, M.D., FESC, FACC, FAHA, FASE, FACP Roger L. Click, M.D., Ph.D., FACC Bijoy K. Khandheria, M.D., FESC, FACC, FASE Natesa G. Pandian, M.D., FACC

#### Jointly Sponsored by:

American Society of Echocardiography and UltraEcho, Ltd.

In cooperation with Mayo Clinic and New York University School of Medicine



#### PROGRAM OVERVIEW

Sights and Sounds of Echocardiography in the Heart of the Big Apple is a premier education venue for echocardiologists, sonographers, fellows in training, and cardiologists in clinical practice. This is held in joint sponsorship with the American Society of Echocardiography (ASE), whose goal is to serve the educational needs of all who practice the art and science of echocardiography. The program will be redesigned yearly to accommodate the evolving needs of inquisitive attendees. It is also an opportunity to review material prior to certification examinations in echocardiography for physicians and sonographers.

Topics include quantitative echocardiography, valvular and ischemic heart disease, stress echocardiography, advances in imaging in coronary disease, state-of-the-art and clinical applications of transesophageal echocardiography, diastology, physiological disease management, and myopericardial diseases. At no additional charge, special workshops are available on focused topics of interest to the general as well as specialty participants.

Unique Features: Workshops which encourage one-on-one interaction. Efforts will be made to introduce the clinical applications using new technology, however, there is no hands-on experience provided. Detailed syllabus materials will be provided.

#### **OBJECTIVES**

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

- Identify essential physical principles of cardiac ultrasound
- Identify common ultrasound artifacts, their genesis, and how to avoid them
- Estimate myocardial function using standard M-mode and 2-D echocardiography as well as newer modalities such as strain imaging, vector velocity imaging, speckle tracking
- Apply the ASE standard recommendations for quantification of the left and right ventricles
- Recognize and quantitate valvular heart disease severity, apply current guidelines, and use the ASE standards for quantification
- Perform clinically relevant calculations of valve areas and intracardiac pressures
- Apply conventional and tissue Doppler techniques to diastolic function analysis
- Improve the accuracy of stress echo interpretations
- Differentiate features of cardiac tamponade, constrictive pericarditis, and restrictive cardiomyopathy
- Determine important applications of transesophageal echocardiography
- Recognize pitfalls associated with contrast and how to avoid them in daily practice

#### WHO SHOULD ATTEND

The program is designed for adult and pediatric cardiologists, cardiovascular surgeons, anesthesiologists, radiologists, nurses, sonographers, and fellows in training. Participants should have practical knowledge of echocardiography.

#### 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, and the syllabus. The deadline to register in advance is Wednesday, April 29, 2009. After this date, individuals must register at the on site rate.

Reduced fee for American Society of Echocardiography 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 \$100 processing fee will be given for written cancellations received fewer than four weeks before the first day of the program (Wednesday, April 29, 2009). No refund will be given for no-shows or for a one-day registration.

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, Mayo Clinic, or New York University School of Medicine 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 28.75 *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 ensuring that its educational mission, and all sponsored educational programs, are uninfluenced by the special interests of any corporation or individual, and its mandate is to retain only those speakers with financial interests that can be reconciled with the goals and educational integrity of the program. While a monetary or professional affiliation with a corporation does not necessarily influence a speaker's presentation, the Essential Areas and policies of the ACCME require that any relationships which might conflict with the educational value of the program be disclosed to the audience. Disclosure of faculty and commercial sponsor relationships, if any, will be made known at the beginning of the program.

# **LODGING** - New York Marriott Marquis in Times Square

Location: Positioned on famed Broadway in New York City, The Marriott Marquis NYC in Times Square is within three blocks of more than 30 theaters. The Marriott Marquis is seven miles from LaGuardia Airport, 18 miles from JFK Airport and 17 miles from Newark International Airport. Guests also are within blocks of luxurious shopping on Fifth Avenue, Rockefeller Center, Radio City Music Hall and MTV -- a location that will give guests the feel they are truly in the center of it all.

Hotel Features: The hotel's eighth-floor lobby features a neon-lit clock inside a Plexiglas globe and a waterfall fountain gently cascading over a backlit glass wall. The ride up the atrium to the guest rooms in the glass-walled elevators is an experience in itself. The Marriott Marquis' the View Restaurant and Lounge, which serves contemporary American cuisine, is the city's only revolving, rooftop restaurant. The Marriott also includes JW's Steakhouse, which features an extensive wine list. Encore, the hotel's theater-themed restaurant, serves meals in a lively room with a tiled mosaic, gold-and-black-striped glass, and a colorful Broadway-motif mural. The Katen Sushi Bar dishes up fresh sushi and sashimi. Another outstanding feature of this New York City hotel is its 4,000-square-foot fitness center, which overlooks Time Square. The Marriott also features a travel desk, theater ticket desk, and 24-hour business center. The hotel houses the Marquis Theatre, located on the third floor, so guests can catch a Broadway production without even leaving the building.

To secure your room at the Marriott Marquis Times Square, please call 800-843-4898 or 212-704-8700 and state that you will be attending the Echo program. The room rate is \$320 single/double a night. When you make your reservation, please be sure to ask about any additional fees, early departure fees, or cancellation penalties. The room block is scheduled to be held until Wednesday, April 29, 2009, however, may be sold out before this date. Therefore, we advise you to register for the program and reserve lodging as soon as possible.

For further information regarding the area and its attractions, please contact the New York Visitor Bureau at: http://www.nycvisit.com.

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



#### **Area Activities**

- Times Square Adjacent
- Fifth Avenue and Madison Avenue Shopping 2 Blocks
- Broadway Theaters 1 Block
- Statue of Liberty 4 Miles
- New York Public Library 6 Blocks
- St. Patrick's Cathedral 8 Blocks
- Good Morning America Set 5 Blocks
- Today Show 1 Mile/2 Kilometers
- Central Park 1 Mile/2 Kilometers
- Carnegie Hall 1 Mile/2 Kilometers
- UN Headquarters 1.5 Miles/2.5 Kilometers
- Empire State Building 1 Mile/1.5 Kilometers
- Madison Square Garden 0.5 Miles/0.8 Kilometers
- Metropolitan Museum of Art 3 Miles/4.8 Kilometers
   Colomon B. Gurranheim Museum 3 Miles/5 Kilometers
- Solomon R. Guggenheim Museum 3 Miles/5 Kilometers
- Radio City Music Hall and Rockefeller Center 5 Blocks
- David Letterman 4 Blocks



#### **TRANSPORTATION**

The best transportation in New York is taxi and subway stations. Parking in New York has an additional cost at each location.

#### **PLEASE NOTE**

Smoking is prohibited in all meeting rooms.

#### **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 acknowledgment of support will be provided at the time of the activity.



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# SIGHTS AND SOUNDS OF ECHOCARDIOGRAPHY in the Heart of the Big Apple

All sessions will be held at the JW New York Marriott Marquis, 1535 Broadway, New York, NY 10036.

Meeting Site Telephone: 212-398-1900 – Guest Fax: 212-704-8930.

**Registration:** 5th Floor – 46th Street Registration Booth Main Meeting Room: 5th Floor – Westside Ballroom

Exhibits/Breaks and Breakfast: 5th Floor - Lyceum Complex

Lunch: 8th Floor - The Broadway Lounge

Views expressed in this program are those of the individual speaker and do not necessarily reflect views of the American Society of Echocardiography, Mayo Clinic, UltraEcho Inc., or New York University School of Medicine.

# **THURSDAY, MAY 21, 2009**

11:00 a.m. Registration – 5th Floor – 46th Street Registration Booth

12:00 p.m. Welcome and Course Overview

Drs. Itzhak Kronzon and Roger L. Click

#### PRINCIPLES OF CARDIAC ULTRASOUND

This session is designed for participants who are wanting to learn about the physics and get knowledge on testing for certification examination. Sonographers and fellows in training would benefit from this session. *Mr. Matt M. Umland, presiding* 

12:15-2:00 p.m. Echocardiography Essentials: Ultrasound Physics,

Transducers, Instruments, Artifacts

Frederick W. Kremkau, Ph.D.

2:00-3:00 p.m. Principles of Doppler Ultrasound: Doppler Effect, Flow,

Color, CW/PW

Frederick W. Kremkau, Ph.D.

3:00-3:15 p.m Self Assessment – Use of Audience Response System

Frederick W. Kremkau, Ph.D.

3:15-3:45 p.m. Refreshment Break – Visit Exhibits

3:45-4:10 p.m The Normal Echocardiographic Examination: Usual and

**Unusual Views** 

Steven A. Goldstein, M.D.

4:10-4:25 p.m Hemodynamics in the Echocardiography Laboratory: Cardiac

Output, Cardiac Index, Qp/Qs, PA pressure, Index of Myocardial

Performance. Illustrative Cases to Demonstrate These

Matt M. Umland. R.D.C.S.

#### ECHOCARDIOGRAPHY FOR VALVULAR HEART DISEASE

This session is designed for participants who want to learn the step by step approach to use of 2-D, 3-D, and Doppler echocardiography to quantitate valvular lesions. Sonographers, fellows in training, and student sonographers would benefit from this session.

Dr. Itzhak Kronzon, presiding

4:25-4:45 p.m. Mitral Stenosis: How to Calculate Valve Area. Case Based,

Step-by-Step

Edward S. Katz, M.D.

4:45-5:10 p.m. Mitral Regurgitation: Case Based Approach to Calculate

Degree of MR, ERO Steven A. Goldstein, M.D.

5:10-5:30 p.m. Aortic Stenosis: Case Based Approach to Calculate Mean

Gradient, Valve Area

Muhamed Saric, M.D., Ph.D.

5:30-5:50 p.m. Aortic Regurgitation: Case Based Approach to Calculate

Degree of AR Smadar Kort, M.D.

5:50-6:00 p.m. Mini Break

6:00-7:15 p.m. Special Evening Workshop

Basic and Advanced Hemodynamics Workbooks Provided. Illustrative Cases

Work With the Faculty.

Valve Area, Regurgitant Orifice Area, Qp/Qs, Cardiac Index

Basic 2-D Measurements Including LA Volume

Elizabeth (Beth) A. Rodriguez, R.D.C.S., Matt M. Umland, R.D.C.S.,

Ronald J. Buono, R.D.C.S., R.D.M.S., R.V.T.

Moderating: Ramesh C. Bansal, M.D. and James B. Seward, M.D.

# FRIDAY, MAY 22, 2009

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

#### MORPHOLOGY AND FUNCTION

This session is designed to provide the fundamental knowledge such that participants will be able to learn how to do a comprehensive evaluation of the left and right ventricular function and hemodynamics and, learn how to evaluate the left atrium. Principles and application of stress echocardiography will also be discussed.

Dr. Smadar Kort, presiding

7:30-7:55 a.m. Diastolic Function: Basic Concepts. What to Measure

Bijoy K. Khandheria, M.D.

7:55-8:15 a.m. Right Ventricle, Right Ventricular Function, Right Heart

Hemodynamics

Use of 2-D, 3-D, Doppler

Krishnaswamy Chandrasekaran, M.D.

8:15-8:35 a.m. Left Atrial Size, Left Atrial Volume: How to Measure.

Natesa G. Pandian, M.D.

8:35-8:55 a.m. Stress Echocardiography: Principles, Case Examples,

Pitfalls. Added Value of Strain, Strain Rate Imaging

Gila Perk, M.D.

8:55-9:30 a.m. Case Studies

ARVD - Natesa G. Pandian, M.D.

Features of Pulmonary Hypertension – *Smadar Kort, M.D.* Hypertensive Response in Stress Echo – *Muhamed Saric, M.D., Ph.D.* 

9:30-9:45 a.m. Questions for the Attendees. Questions From the Attendees.

Drs. Khandheria, Chandrasekaran, Pandian, and Perk;

Dr. Kort, moderator

9:45-10:15 a.m. Refreshment Break - Visit Exhibits

#### MYOCARDIAL DISEASE, PERICARDIAL DISEASE Dr. Natesa G. Pandian, presiding

10:15-10:35 a.m. Constrictive Pericarditis: Comprehensive 2-D, 3-D, Doppler

Evaluation

Itzhak Kronzon, M.D.

10:35-11:00 a.m. Echo-Directed Pericardiocentesis: Technique, Experience.

James B. Seward, M.D.

11:00-11:25 a.m. Hypertrophic Cardiomyopathy: Morphologic Variants.

Diagnosis, Treatment Roger L. Click, M.D., Ph.D.

11:25-11:55 a.m. Illustrative Cases of Myocardial and Pericardial Disease

Cases will demonstrate key features, what evaluation is

required.

Amyloid Infiltration - Daniel Spevack, M.D.

Restrictive Cardiomyopathy – Muhamed Saric, M.D., Ph.D.

Hypereosinophilia – Smadar Kort, M.D.

11:55 a.m.- Illustrative Cases

12:15 p.m. Ventricular Noncompaction, Radiation Heart Disease,

Pheochromocytoma

Stress Cardiomyopathy - Illustrative Cases, Pathognomic

Features

Ramesh C. Bansal, M.D. and Roger L. Click, M.D., Ph.D.

12:15-12:30 p.m. Panel Discussion

Drs. Kronzon, Seward, and Click; Dr. Pandian, moderator

12:30-1:45 p.m. Lunch – The Broadway Lounge – 8th Floor

#### PARALLEL SESSIONS - CLINICAL CHALLENGES, APPROPRIATE USE

Location: Westside Ballroom (Main Ballroom)

This session is designed for physicians. Discussion will focus on the clinical aspects of valvular heart disease, use of guidelines and appropriateness of echocardiography.

Dr. Ramesh C. Bansal, presiding

1:45-2:10 p.m. Asymptomatic Aortic Stenosis: To Operate or Not to Operate.

To Exercise or Not to Exercise. ACC/AHA Guidelines Say...

Bijoy K. Khandheria, M.D.

2:10-2:35 p.m. Asymptomatic Severe Mitral Regurgitation. Two Strategies.

Which Works When? ACC/AHA Guidelines Say

Steven A. Goldstein, M.D.

2:35-3:00 p.m. Asymptomatic Severe Aortic Regurgitation: Timing of

Operation. ACC/AHA Guidelines. Role of Vasodilators

Bijoy K. Khandheria, M.D.

3:00-3:25 p.m. Endocarditis 2009. Diagnosis, Treatment. New SBE

Prophylaxis Guidelines Ramesh C. Bansal, M.D.

3:25-3:50 p.m. Appropriateness Criteria in Echocardiography

Steven A. Goldstein, M.D.

3:50-4:00 p.m. Panel Discussion

Drs. Khandheria and Goldstein; Dr. Bansal, moderator

4:00-4:30 p.m. Refreshment Break – Visit Exhibits

#### SHUSH, BEHIND CLOSED DOORS FOR THE SONOGRAPHERS

Location: Juilliard Complex - 5th Floor

This session is designed for sonographers. Discussion will focus on technical aspects of echocardiography. At the end of the session will be a quiz demonstrating commonly encountered errors or missteps.

Ms. Elizabeth (Beth) A. Rodriguez, presiding

1:45-2:10 p.m. Echo Artifacts

Frederick W. Kremkau, Ph.D.

2:10-2:35 p.m. Carotid IMT, Carotid Artery Imaging: Anatomy, Views,

Measurements

Ronald J. Buono, R.D.C.S., R.D.M.S., R.V.T.

2:35-3:00 p.m. Diastolic Function: Step by Step Approach – Case Examples Only

Matt M. Umland, R.D.C.S.

Mitral Regurgitation, Aortic Regurgitation: How to Obtain the 3:00-3:25 p.m.

Essential Measurements, Putting it Together. Case Studies

Elizabeth (Beth) A. Rodriguez, R.D.C.S.

3:25-4:00 p.m. Cases. I Present, You Interpret

Mathew P. Varkey, B.S., R.D.C.S., R.D.M.S., R.V.T.

Refreshment Break - Visit Exhibits 4:00-4:30 p.m.

Special Session - How to 4:30-6:30 p.m.

3-D/4-D Imaging

(Attempt will be made to show instrumentation of each

vendor who participates.)

Mani A. Vannan, MBBS, Ramesh C. Bansal, M.D., and

Krishnaswamy Chandrasekaran, M.D.

Adjourn 6:30 p.m.

# **SATURDAY, MAY 23, 2009**

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

#### SPECIAL TOPICS

This session is designed to provide the basic principles of new technologies in cardiovascular ultrasound and, disseminate applications by using illustrative examples.

Dr. Muhamed Saric, presiding

8:00-8:25 a.m. Hemodynamics in the Echocardiographic Laboratory

Itzhak Kronzon, M.D.

Myocardial Function: From Bench to Bedside 8:25-8:50 a.m.

Bijoy K. Khandheria, M.D.

Twist, Torsion, Vortex. Simplifying Terminology 8:50-9:15 a.m.

Partho P. Sengupta, M.D.

9:15-9:40 a.m. 4-D Imaging: Case Studies

Mani A. Vannan, MBBS and Ramesh C. Bansal, M.D.

Refreshment Break - Visit Exhibits 9:40-10:00 a.m.

#### WORKSHOP: IMAGING THE MYOCARDIUM

This will be a practical demonstration of how new technologies of imaging the myocardium are being implemented on selected manufacturers of ultrasound machines.

10:00 a.m.-Instrumentation, Knobology, Acquisition and Interpretation

Strain, Strain Rate, Speckle Tracking, Deformation Imaging 12:00 p.m.

Partho P. Sengupta, M.D. and Mr. Matt M. Umland, R.D.C.S.

#### SPECIAL TOPICS IN CARDIOVASCULAR IMAGING

12:00-12:25 p.m. Cardiac MRI, Cardiac CT: Complimentary or Competitive

Mario J. Garcia, M.D.

12:25-1:30 p.m. Lunch - The Broadway Lounge - 8th Floor

**WORKSHOPS** 

1:30-2:15 p.m. Contrast Enhanced Imaging

How to, How not to, Reimbursement, Illustrative Cases Smadar Kort, M.D. and Ronald J. Buono, R.D.C.S., R.D.M.S., R.V.T.

2:15-3:00 p.m. Imaging the Right Ventricle

Krishnaswamy Chandrasekaran, M.D., Ramesh C. Bansal, M.D.,

and Matt M. Umland, R.D.C.S.

3:00-3:45 p.m. Intraoperative Echocardiography: 2-D and 3-D

Patho Anatomy of the Mitral Valve

Ventricular Assist Device

Views

Roger L. Click, M.D., Ph.D., Krishnaswamy Chandrasekaran, M.D.,

and Ramesh C. Bansal, M.D.

3:45-4:00 p.m. Panel Discussion

Drs. Kort, Chandrasekaran, and Bansal; Dr. Click, moderator

4:00-4:30 p.m. Refreshment Break – Visit Exhibits

#### TRANSESOPHAGEAL ECHOCARDIOGRAPHY: 2009

Dr. Roger L. Click, presiding

4:30-4:55 p.m. Patent Foramen Ovale: To Close or Not to Close.

Bijoy K. Khandheria, M.D.

4:55-5:20 p.m. Atherosclerosis of the Aorta: Disease or Manifestation of Disease

Guilty by Association or Smoking Gun

Paul A. Tunick, M.D.

5:20-5:40 p.m. Percutaneous Valve Procedures. Critical Role of TEE

Steven A. Goldstein, M.D.

5:40-6:15 p.m. TEE Cases. Some You Have Seen, Some You Will See

Roger L. Click, M.D., Ph.D. and Ramesh C. Bansal, M.D.

# **SUNDAY, MAY 24, 2009**

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

#### SPECIAL SESSION - ADULT CONGENITAL HEART DISEASE

7:30-8:00 a.m. Introduction: Adult Congenital Heart Disease: A Special

Population With Special Needs

Sabrina D. Phillips, M.D.

8:00-8:30 a.m. Overview of Septal Defects: Diagnosis and Management

Sabrina D. Phillips, M.D.

8:30-9:00 a.m. Transcatheter Intervention in Congenital Heart Disease

Allison K. Cabalka, M.D.

9:00-9:30 a.m. Echo Assessment of Anomalous Pulmonary Venous Connections

Naser M. Ammash, M.D.

9:30-9:45 a.m. Interesting Congenital Case

Benjamin W. Eidem, M.D.

9:45-10:00 a.m. Refreshment Break - Visit Exhibits

10:00-10:30 a.m. Evaluation of the Right Ventricle

Benjamin W. Eidem, M.D.

10:30-11:00 a.m. Evaluation of the Adult after Tetralogy of Fallot Repair

Naser M. Ammash, M.D.

11:00-11:30 a.m. Coarctation of the Aorta: Evaluation and Management

Allison K. Cabalka, M.D.

11:30 a.m.- Pregnancy in the Patient With Congenital Heart Disease

12:00 p.m. Sabrina D. Phillips, M.D.

12:00-12:30 p.m. More Interesting Cases

All Faculty

12:30 p.m. Closing Remarks, Program Evaluation, CME Credits,

Adjournment



# SIGHTS AND SOUNDS Of **ECHOCARDIOGRAPHY**

# in the Heart of the Big Apple

MAY 21-24, 2009



#### **Mail Form and Payment To:**

UltraEcho, Ltd. Attention: Sheryl Dohrmann 200 1st Street SW/GO-06-138SW

Rochester, MN 55905

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- Basic and Advanced Echocardiography
- Special Session organized by Mayo Clinic Adult Congenital Simulation to assist in preparation of Registry/Board
  - Congenital Heart Disease for the Adult Cardiologist **Heart Center** 
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