

27th Annual
State-of-the-Art
ECHOCARDIOGRAPHY
FINAL PROGRAM



February 14 - 18, 2014

**Hyatt Regency Scottsdale
Scottsdale, AZ**

Learning Lab Co-Directors:

Roberto M. Lang, MD, FASE
Bijoy K. Khandheria, MD, FASE

Course Director:

Vera H. Rigolin, MD, FASE

Learning Lab

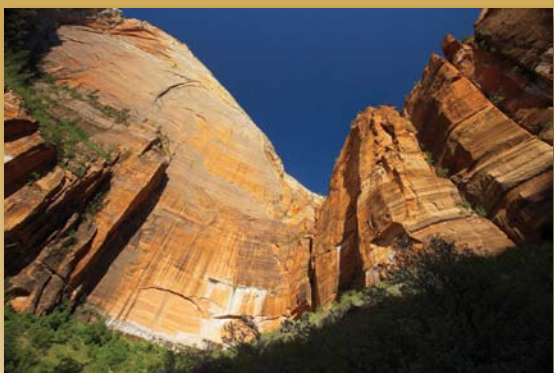
February 14 - 15

Maintenance of Certification Program

February 15

Main Conference and Exhibits

February 16 - 18



Jointly Sponsored by ASE and the ASE Foundation

Welcome Message and Faculty

Welcome Message

Welcome to the 27th Annual State-of-the Art Echocardiography conference, a premier program organized by the American Society of Echocardiography.

In keeping with past tradition, we continue to have first-rate physicians and sonographers presenting a broad range of echo-related topics to enhance your clinical practice. We will continue to discuss information on pertinent topics such as stress echo, hemodynamics, heart failure and contrast echo using a combination of didactic lectures and case presentations. We will once again offer hands-on training in our computer learning lab. New this year will be a full-day valve symposium, where cardiologists, surgeons and sonographers will discuss medical, percutaneous and surgical options for patients with valve disorders. Also new will be a Maintenance of Certification (MOC) session that will allow for credit towards ABIM recertification.

Arizona is beautiful this time of year allowing for outdoor activities in a comfortable environment. The new location for our conference at the Hyatt Regency Scottsdale offers numerous indoor and outdoor activities for you and your family to enjoy.



Welcome to Scottsdale and the 27th Annual State-of-the-Art conference!

Vera Rigolin, MD, FASE

Course Director

Vera H. Rigolin, MD, FASE
Northwestern University, Chicago, IL

Learning Lab Co-Directors

Bijoy K. Khandheria, MD, FASE
Past President, American Society of Echocardiography
Aurora Health Care, Milwaukee, WI

Roberto M. Lang, MD, FASE
Past President, American Society of Echocardiography
University of Chicago, Chicago, IL

Faculty

Blasé A. Carabello, MD
Baylor College of Medicine, Houston, TX

Keith A. Collins, MS, RDCS
University of Chicago Medical Center, Chicago, IL

Bonnie J. Kane, BS, RDCS, FASE
Northwestern University, Chicago, IL

Christopher J. Kramer, BA, RDCS, FASE
Aurora Healthcare, Milwaukee, WI

Itzhak Kronzon, MD, FASE
Lenox Hill Hospital, New York, NY

Patrick M. McCarthy, MD
Northwestern University, Chicago, IL

David J. Mehlman, MD, FASE
Northwestern University, Chicago, IL

Muhamed Saric, MD, PhD, FASE
New York University, New York, NY

Partho P. Sengupta, MD, DM, FASE
Mount Sinai Heart Medical Center, New York, NY

Sanjiv J. Shah, MD
Northwestern University, Chicago, IL

Matt M. Umland, RDCS, FASE
Aurora Healthcare, Milwaukee, WI

About ASE

As the largest global organization for cardiovascular ultrasound imaging, The American Society of Echocardiography (ASE) is the leader and advocate, setting practice standards and guidelines. Comprised of over 16,000 physicians, sonographers, nurses and scientists, ASE is a strong voice providing guidance, expertise and education to its members with a commitment to improving the practice of ultrasound and imaging of the heart and cardiovascular system for better patient outcomes.

ASE Membership

ASE serves its members in numerous ways by providing education, advocacy, research, practice guidelines and a community for their profession. Did you know your ASE membership affords you over \$400 of FREE credits a year, in addition to discounts on all ASE educational courses and products? Also included is a monthly subscription to the *Journal of the American Society of Echocardiography* (JASE), help with legislative coding and reimbursement issues and other career resources.

Program Overview

State-of-the-Art Echocardiography is a premier educational venue for cardiovascular ultrasound in clinical practice. This superbly rated meeting is filled to capacity year after year. Although the course is refocused yearly to ensure the most up to date information, topics will include quantitative echocardiography, valvular and ischemic heart disease, stress/contrast echocardiography, advances in imaging in coronary disease, and myopericardial diseases. A full-day Heart Valve Symposium will be held on Sunday, February 16, 2014, which will include echo innovations and applications for clinical practice.

Objectives

- To present recent advances in the diagnosis and treatment of cardiovascular disease to a wide range of cardiovascular health care providers.
- To present established and emerging cardiac ultrasound imaging modalities that can be used to provide optimal patient care.
- To discuss the ASE guidelines in the context of case examples and clinical applications.
- To present information that highlights the utility of an integrated and multidisciplinary approach to patient care.
- To provide the opportunity for interaction between experts and practitioners, which will facilitate implementation of information presented into clinical practice.

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

- Incorporate state-of-the art clinical applications of echocardiography/Doppler ultrasound into clinical decision-making.
- Explain how to use color and spectral Doppler in a quantitative fashion.
- Identify specific valvular lesions and understand the various medical, interventional and surgical options for treatment.
- Assess left and right ventricular function quantitatively.
- Describe the value and pitfalls of contrast echo.
- Recognize how to implement ASE guidelines in management of patients with valvular heart disease, systolic and diastolic dysfunction.
- Apply knowledge of echocardiography in the care of patients with left ventricular assist devices and who have undergone heart transplantation.

Who Should Attend

State-of-the-Art Echocardiography's program is designed for adult and pediatric cardiologists, cardiovascular surgeons, anesthesiologists, radiologists, nurses, sonographers and fellows in training. Participants should have a practical knowledge of echocardiography.

Disclaimer

The information provided during this CME activity is for continuing education purposes only and is not meant to substitute for the independent medical judgment of a healthcare provider relative to diagnostic and treatment options of a specific patient's condition.

Commercial Support Disclosure:

Educational Grants: This activity is supported in part by educational grants from Abbott Vascular, Astellas, Biosense Webster, Lantheus Medical Imaging, Medtronic and Thoratec.

In-kind Donations: This activity is supported in part by in-kind donations of software from Philips Healthcare, GE Healthcare, FUJIFILM Medical Systems USA, Inc., and Epsilon Imaging.



CONNECT with ASE
in Scottsdale, AZ

 **NETWORK**
with other attendees in a
secured online community
Connect.asecho.org
Directory > My Communities >
State-of-the-Art Echocardiography

 **TWEET**
your take-away thoughts
#SOTA

 **SHARE**
your pictures from the event
www.facebook.com/asecho

Attendee Information and Regulations

Accreditation and Designation

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 the ASE Education and Research Foundation. The American Society of Echocardiography is accredited by the ACCME to provide continuing medical education for physicians.

The American Society of Echocardiography designates this live activity for a maximum of 35.75 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ASE designates the State-of-the-Art Echocardiography Learning Lab for a maximum of 16 hours, the Maintenance of Certification session for 3.75 hours, and a maximum of 19.75 hours for the Main Conference. Attendees must be registered for the Learning Lab to claim full credit. The total amount of hours that can be claimed for attending both the Main Conference and Learning Lab is 35.75 hours and 23.50 for attending both the Main Conference and Maintenance of Certification session.

All or a portion of this educational activity may meet the CME requirement for IAC Echocardiography accreditation.

ARDMS, CARDUP 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 not influenced by the special interests of any corporation or individual, and its mandate is to retain only those speakers whose financial interests can be effectively resolved to maintain 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 that could possibly conflict with the educational value of the program be resolved prior to the educational session and disclosed to the audience.

Registration Location and Hours

Attendee registration is located outside the Arizona Ballroom.

Thursday, February 13.....	4:00 pm – 6:00 pm
Friday, February 14	7:00 am – 5:30 pm
Saturday, February 15.....	7:00 am – 5:30 pm
Sunday, February 16	7:00 am – 6:00 pm
Monday, February 17	7:00 am – 5:30 pm
Tuesday, February 18.....	7:00 am – 12:00 pm

How to Obtain Credit

CLAIM YOUR CME AND EVALUATION INSTRUCTIONS:

1. **ASE Members:** Go to www.asecho.org and log on to the Member Portal with your username (email) and password.
 - a. Click on **ASEUniversity and CME Credits** (This will take you directly to your ASEUniversity profile)
2. **Non-Members:** Go to www.aseuniversity.org, create a new account or log into your existing ASEUniversity account.
3. Once logged into ASEUniversity the top of the page should say, "Hello, ____." Click **Your Account**.
4. Under **Your Account**, click on **Add Access Code** and enter the code, **SOTA2014**.
5. Verify your registration information. Please be sure to use the same information that you used to register for the event.
6. Once verified, click **Take Evaluation** to claim your CME credit. CME credits are not earned until the entire evaluation has been completed.
7. Your certificate will be available for immediate download and can also be found under **Your Account** in the **CE Transcript**.

Deadline to claim credit is March 21, 2014.

Food Functions

ASE will provide a continental breakfast, morning coffee breaks and afternoon refreshment breaks for registered attendees of the main conference in the Vaquero Ballroom. Please refer to the program schedule on pages 6 – 8 for the times of the daily coffee breaks and continental breakfast.

ASE will provide lunch for registered attendees of the main conference in the Vaquero Ballroom on Sunday, February 16 and Monday, February 17th. Lunch times may vary. Please refer to the program schedule on pages 6 – 8 for times.

The Hyatt Regency Scottsdale offers their guest a variety of dining options. Please see page 5 for more details.

Welcome Reception

ASE cordially invites you and your guests to the 27th Annual State-of-the-Art Echocardiography Welcome Reception on Monday evening, February 17th from 5:30 pm–6:30 pm in the Vaquero Ballroom. This casual reception welcomes you to "the heart of the Sonoran Desert" and offers you the perfect opportunity to meet faculty, friends and colleagues.

Cell Phone Use

Cell phones should not be used in the educational sessions. For consideration of faculty and other attendees, please remember to turn your cell phones and/or other electronic devices off or set to vibrate mode.

Safety

Audience seating is on a first-come, first-served basis. According to fire code, a session must be closed if the room fills to capacity. Inappropriate behavior or undesirable conduct, including, but not limited to, verbal or physical abuse, whether threatened or performed, will not be permitted or tolerated. You must wear your name badge at all times when attending the session or events.

Photography/AV Policy

No person may record any portion of the 27th Annual State-of-the-Art Echocardiography, either by video, still or digital photography, audio or any other recording or reproduction mechanism. This includes recording of presentations and supporting audio visual materials.

Taking photos of, or recording the content of, presentation slides is also prohibited and is considered intellectual piracy. Attendees who ignore this policy will be asked to leave the educational session and are at risk of losing their name badge and attendance privileges.

ASE reserves the rights to all recordings or reproductions at ASE meetings. Please be aware that during the 27th Annual State-of-the-Art Echocardiography, attendees, vendors, guests and exhibitors may be photographed or videotaped by ASE staff capturing the event. Some of these photographs or videos may be displayed by ASE in future publication or other materials. By virtue of your attendance, you agree to allow ASE to use photographs of you in its promotional materials.

Children

ASE does not offer childcare services. Due to limited seating capacity and the highly technical nature of this program, children are not allowed to attend the educational session. For their safety, children must be accompanied by an adult at all times when attending the course events.

Scottsdale, Arizona

When it comes to unique experiences, Scottsdale has you covered with boredom-busting options that run the gamut from world-class museums and a renowned botanical garden to guided city tours, architectural wonders and the nation's largest wilderness preserve.

You'll also find culinary attractions like a working olive mill and a winery where you can create your own special blend. Amusement parks, an award-winning zoo and a railroad museum appeal to kids of all ages. And for those hankering for a taste of Scottsdale's frontier roots, the state's largest remake of a 1880s Western town is just minutes away.

Hyatt Regency Scottsdale Dining Options

- **Alto ristorante e bar:** Winner of the 2013 Wine Spectator Restaurant Award, this comfortable Italian restaurant offers fresh and flavorful dishes with an emphasis on "the season." In the Formaggio & Salumi Cellar, Alto's unique collection of Italy's best artisanal cheeses and meats are complemented by their extensive selection of wines from around the world, with an emphasis on Italy. Dinner is served both indoors and alfresco nestled around terrace fire pits, creating a convivial atmosphere. Top off your evening with a complimentary gondola ride along the resort's waterways, complete with singing gondoliers.
- **Cantina Due:** Discover the hotel's best kept secret; Cantina Due. Half-way between SWB, a Southwest bistro, and Alto ristorante e bar, this lively Scottsdale bar is nestled between the two restaurants. Here, you can experience the quintessential handcrafted cocktail made from freshly squeezed juices, artisan syrups and only natural and organic ingredients. Where the two restaurants collide, so do their menus! For only in Cantina Due can you relax and enjoy an open-air terrace while dining from the best of both worlds; SWB and Alto ristorante e bar.
- **Canyon Market:** Canyon Market is a 24 hour market and hiking lifestyle store that embraces the Sonoran outdoors. Stop by for directions to the best hiking locations around the Valley. Purchase performance food and gear essential to an active lifestyle, or simply visit to enjoy a cup of Starbucks coffee and a freshly-baked muffin. Throughout the afternoon and evening, sandwiches, wraps, salads, daily organic offerings, pastries and homemade ice cream are available for an easy "grab and Go" option.
- **Center Stage Bar:** Cascading fountains and glowing fireplaces set the mood for the indoor/outdoor allure of Center Stage Bar. Come and experience the sounds of our live music showcase... from southern pop with a country flare and acoustic soul to edgy folk and soulful vocals. Entertainment nightly.
- **Noh:** Serving a theatre of Japanese cuisine... sushi, sashimi and traditional Japanese dishes with a contemporary twist
- **SWB, a southwest bistro:** Energized by the delicious aromas and activity coming from its open kitchen, this casual bistro features southwest specialties prepared in wood-fired ovens. Set against a backdrop of the majestic McDowell Mountains, relax and enjoy breakfast, lunch and dinner and Sunday Brunch, indoors or out.

Source: <http://scottsdale.hyatt.com>

Schedule of Events

LEARNING LAB

FRIDAY AND SATURDAY, FEBRUARY 14-15, 2014

Pre-Registration Required

Location: Vaquero Ballroom

FRIDAY, FEBRUARY 14, 2014

7:00 am	Continental Breakfast
8:00 am	Welcome and Introduction to the Classroom <i>R. Lang, B. Khandheria</i>
8:15 am	Introduction to Software and Computers <i>M. Umland</i>
8:30 am	Basic Measurements: LV, LA, RV, Biplane Simpson, LVEF <i>R. Lang, K. Collins</i>
9:30 am	Basic Hemodynamics: VTI, SV, CO, CI, PA Pressure <i>B. Khandheria, M. Umland</i>
10:30 am	Break
10:45 am	Aortic Valve Regurgitation: Vena Contracta, Regurgitant Orifice <i>R. Lang, B. Kane</i>
11:45 am	Aortic Valve: Mean Gradient, Valve Area, TAVR Measurements <i>B. Khandheria, C. Kramer</i>
12:45 pm	Question and Answer <i>All Faculty</i>
1:00 pm	Lunch
2:00 pm	Mitral Stenosis <i>B. Khandheria, C. Kramer</i>
3:00 pm	Mitral Regurgitation: Vena Contracta, Regurgitant Orifice <i>R. Lang, B. Kane</i>
4:00 pm	Diastolic Function, Constriction, Restriction <i>B. Khandheria, M. Umland, C. Kramer</i>
5:00 pm	Question and Answer <i>All Faculty</i>
5:15 pm	Adjourn

SATURDAY, FEBRUARY 15, 2014

7:15 am	Continental Breakfast
8:00 am	Right Ventricle; Size and Function <i>R. Lang, B. Kane</i>
9:00 am	Myocardial Mechanics 101 <i>P. Sengupta, C. Kramer</i>
10:00 am	Prosthetic Heart Valve: Gradients, Valve Area <i>B. Khandheria, M. Umland</i>
11:00 am	Break
11:15 am	Challenging Cases, Mystery Cases. Who Will Win? <i>R. Lang, B. Khandheria, M. Umland, K. Collins</i>
12:15 pm	Lunch

1:15 pm	Pulmonary Hypertension: Comprehensive Evaluation <i>R. Lang, K. Collins</i>
2:15 pm	Everything You Want to Ask and Case Reviews <i>All Faculty</i>
3:00 pm	Break
3:15 pm	Myocardial Mechanics: Beyond 101 <i>P. Sengupta, C. Kramer</i>
4:15 pm	Wild Wild West, Cases from the Echo Corral <i>All Faculty</i>
5:15 pm	Question and Answer <i>All Faculty</i>
5:30 pm	Adjourn

MAINTENANCE OF CERTIFICATION

SATURDAY, FEBRUARY 15, 2014

Additional Fee Required

Location: Arizona Ballroom

1:00 pm	Maintenance of Certification by Case-Based Echocardiography <i>I. Kronzon, S. Shah, M. Saric</i>
3:00 pm	Break
3:15 pm	Maintenance of Certification by Case-Based Echocardiography <i>I. Kronzon, S. Shah, M. Saric</i>
5:00 pm	Adjourn

VALVE SYMPOSIUM

SUNDAY, FEBRUARY 16, 2014

Location: Arizona Ballroom

MITRAL VALVE DISEASE

V. Rigolin, presiding

7:00 am	Continental Breakfast and Visit Exhibits
7:45 am	Welcome <i>B. Byrd</i>
8:00 am	Clinical Spectrum of the MV Disease in the US in 2013 <i>B. Carabello</i>

DEGENERATIVE MITRAL VALVE DISEASE

V. Rigolin, presiding

8:30 am	2D and 3D Imaging of Degenerative MV Disease <i>R. Lang</i>
8:45 am	Percutaneous Treatment Options – the Critical Role of Echo <i>I. Kronzon</i>
9:00 am	Echo Before, During and After MV Repair Surgery <i>V. Rigolin</i>

Schedule of Events

9:15 am	Case Presentations Posterior Prolapse – <i>B. Khandheria</i> Anterior Prolapse – <i>D. Mehlman</i> Bileaflet Prolapse – <i>M. Saric</i> Barlow's Valve – <i>P. Sengupta</i>
10:00 am	Break and Visit Exhibits

FUNCTIONAL AND ISCHEMIC MITRAL REGURGITATION *V. Rigolin, presiding*

10:30 am	What is it and Why is it So Challenging to Treat? <i>P. McCarthy</i>
10:50 am	2D and 3D Imaging of Functional and Ischemic Mitral Regurgitation <i>P. Sengupta</i>
11:05 am	Case Presentations Valve Should Be Repaired – <i>M. Saric</i> Is This Valve Too Complex to Repair? – <i>V. Rigolin</i> Valve Should Be Replaced – <i>R. Lang</i> Can This Valve Be Clipped? – <i>I. Kronzon</i>

TRICUSPID VALVE DISEASE *R. Lang, presiding*

11:40 am	Anatomy and Function of the “Other” Valve <i>V. Rigolin</i>
11:55 am	When to Fix the Tricuspid Valve in Patients With and Without MV Disease <i>P. McCarthy</i>
12:15 pm	Case Presentations TV Disease Due to Carcinoid – <i>M. Umland</i> TV Disease Due to Afib – <i>I. Kronzon</i> TV Disease Due to Pacemaker – <i>C. Kramer</i>
1:00 pm	Lunch and Visit Exhibits

AORTIC VALVE DISEASE *B. Khandheria, presiding*

2:00 pm	2D and 3D Imaging of AS <i>B. Khandheria</i>
2:15 pm	Low Gradient, Low Output AS With Low and Normal EF <i>B. Carabello</i>
2:35 pm	When Should I Refer a Patient for TAVI? What's the Data? <i>I. Kronzon</i>
2:50 pm	Echo Before, During and After TAVI – What Are the Critical Elements? <i>M. Saric</i>
3:05 pm	Case Presentations TAVI – Perfect Candidate – <i>D. Mehlman</i> TAVI – Controversial Candidate – <i>V. Rigolin</i> TAVI Complications – How Echo Helped Find the Problem – <i>I. Kronzon</i>

3:40 pm	New Surgical Innovations in the Treatment of Aortic Valve Disorders <i>P. McCarthy</i>
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4:00 pm	Break and Visit Exhibits
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AORTIC VALVE DISEASE *M. Saric, presiding*

4:15 pm	Quantification of Aortic Regurgitation – How Do I Do it? <i>M. Saric</i>
4:30 pm	Case Presentations Bicuspid Valve – <i>D. Mehlman</i> Aortic Dissection – <i>B. Khandheria</i> Endocarditis – <i>R. Lang</i> Marfans – <i>P. Sengupta</i>

PROSTHETIC VALVES

5:00 pm	Pathologic Specimens with Echo Correlates <i>D. Mehlman</i>
6:00 pm	Adjourn

MONDAY, FEBRUARY 17, 2014 Location: Arizona Ballroom

HEART FAILURE *S. Shah, presiding*

7:00 am	Continental Breakfast and Visit Exhibits
8:00 am	Quantitation of Systolic Function – The Old and the New <i>S. Shah</i>
8:20 am	Case Presentations Nonischemic Cardiomyopathy – <i>V. Rigolin, B. Kane</i> Ischemic Cardiomyopathy – <i>B. Khandheria, C. Kramer</i> Noncompaction – <i>B. Khandheria, C. Kramer, M. Umland</i> Stress Cardiomyopathy – <i>M. Saric, M. Umland</i>
9:00 am	Cases: How Do I Use Echo to Assess a Patient With an LVAD or Transplant? Normal LVAD – <i>C. Kramer</i> LVAD Complications – <i>M. Umland</i> Healthy Post Heart Transplant Patient: What to Look for With Echo – <i>D. Mehlman</i> Transplant Rejection – <i>R. Lang</i>
9:40 am	Cases: Resynchronization Therapy – Can Echo Identify the Optimal Candidate? Responder – <i>B. Khandheria</i> Nonresponder – <i>M. Saric</i> Optimization – <i>K. Collins</i>
10:00 am	Break and Visit Exhibits

Schedule of Events

HEART FAILURE

P. Sengupta, presiding

- | | |
|----------|---|
| 10:30 am | Heart Failure with Preserved EF: Who, What, Where and How?
<i>S. Shah</i> |
| 10:50 am | How Do I Use the ASE Guidelines to Measure Diastolic Function?
<i>R. Lang</i> |
| 11:10 am | Demystifying Strain Imaging
<i>P. Sengupta</i> |
| 11:30 am | Twist and Shout
<i>B. Khandheria</i> |
| 11:50 am | Case Presentations
Grade 1, 2, 3 – <i>V. Rigolin</i>
Indeterminate LV Filling Pressures – <i>M. Saric</i>
Where Strain Helped Me – <i>P. Sengupta</i>
Abnormal LV Mechanics – <i>B. Khandheria</i> |
| 12:40 pm | Lunch and Visit Exhibits |

THE RIGHT VENTRICLE

V. Rigolin, presiding

- | | |
|---------|--|
| 1:30 pm | Anatomy and Function of the Right Ventricle
<i>S. Shah</i> |
| 1:50 pm | Case Presentations
RV Infarct – <i>I. Kronzon</i>
PE – <i>D. Mehlman</i>
RV Dysplasia – <i>R. Lang</i> |
| 2:30 pm | The ABCs of Pulmonary Hypertension
<i>S. Shah</i> |
| 2:50 pm | Imaging in Pulmonary Hypertension
<i>B. Khandheria</i> |
| 3:10 pm | Case Presentations
Primary Pulmonary Hypertension – <i>R. Lang</i>
Scleroderma – <i>S. Shah</i>
LV Dysfunction – <i>M. Saric</i> |
| 3:45 pm | Break and Visit Exhibits |

THE PERICARDIUM

D. Mehlman, presiding

- | | |
|---------|--|
| 4:00 pm | Pericardial Constriction: What is It and How Do I Diagnose It?
<i>I. Kronzon</i> |
| 4:20 pm | Myocardial Restriction: What is It and How Does It Differ from Constriction?
<i>M. Saric</i> |
| 4:40 pm | Case Presentations
<i>B. Kane, K. Collins, V. Rigolin, D. Mehlman</i> |
| 5:30 pm | Adjourn |

TUESDAY, FEBRUARY 18, 2014

MISCELLANEOUS MYOCARDIAL DISORDERS

B. Khandheria, presiding

Location: Arizona Ballroom

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|---------|--|
| 7:00 am | Continental Breakfast and Visit Exhibits |
| 8:00 am | The Heart of an Athlete: When Do I Ring the Alarm?
<i>R. Lang</i> |
| 8:20 am | Hypertrophic Cardiomyopathy: The Triumphs and Pitfalls of Echo Imaging
<i>V. Rigolin</i> |
| 8:40 am | Case Presentations
Is It LVOT Obstruction or MR? – <i>D. Mehlman</i>
Alcohol Ablation – <i>I. Kronzon</i>
Surgical Myomectomy – <i>B. Khandheria</i>
Associated Mitral Valve Disorders – <i>P. Sengupta</i> |
| 9:30 am | Break and Visit Exhibits |

CORONARY ARTERY DISEASE

M. Saric, presiding

- | | |
|----------|--|
| 10:00 am | Stress Echo: The Basics and Beyond
<i>D. Mehlman</i> |
| 10:20 am | Case Presentations
Single Vessel Disease – <i>B. Kane</i>
Multivessel Disease – <i>K. Collins</i>
False Negative – <i>M. Umland</i>
False Positive – <i>C. Kramer</i> |
| 11:00 am | Cases: How to Use Contrast to Improve Your Echo Images
Optimizing Machine Settings – <i>B. Kane</i>
Contrast Helped Me Make the Diagnosis in the Stress Lab – <i>B. Khandheria</i>
Unusual Findings in the Heart After Contrast Injection – <i>R. Lang</i> |
| 11:30 am | Illustrative Cases: Post MI Complications
Is It LV Aneurysm or Pseudoaneurysm? – <i>M. Saric</i>
Ruptured Papillary Muscle – <i>V. Rigolin</i>
Ischemic MR – <i>I. Kronzon</i> |
| 12:00 pm | Adjourn |

See you next year at the 28th Annual State-of-the-Art Echocardiography! February 21 – 24, 2015 Hyatt Regency Scottsdale Scottsdale, AZ

AMERICAN SOCIETY OF ECHOCARDIOGRAPHY

Silver Anniversary

25 TH ANNUAL
SCIENTIFIC SESSIONS

OREGON CONVENTION CENTER
JUNE 20-24, 2014 *in* PORTLAND, OR
• NEW FRIDAY SESSIONS! •

REGISTRATION NOW OPEN AT
ASESCIENTIFICSESSIONS.ORG



Exhibit Information

Exhibit Location and Hours

Exhibits are located in the Vaquero Ballroom during the dates and hours listed below.

Sunday, February 16 7:00 am – 4:30 pm
Monday, February 17 7:00 am – 6:30 pm
(Networking Reception 5:30 pm – 6:30 pm)
Tuesday, February 18 7:00 am – 10:00 am

Exhibitor Descriptions

(As of “to print” date)



American Society of Echocardiography (ASE)
2100 Gateway Centre Blvd., Suite 310
Morrisville, NC 27560
United States
Phone: 1-919-861-5574
Fax: 1-919-882-9900
Web Site: www.asecho.org



Digisonics
3701 Kirby Drive
Houston, TX 77098
United States
Phone: 1-713-529-7979
Toll Free: 1-800-940-3240
Fax: 1-713-529-7999
Web Site: www.digisonics.com

For over 40 years, Digisonics has provided cardiovascular image management and structured reporting systems. Ranked #1 Cardiology PACS by KLAS for the past five years, the DigiView system is the solution chosen by clinicians to gain workflow efficiency, cut costs and improve the quality of patient care.



Epsilon Imaging, Inc.
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Fax: 1-734-369-5120
Web Site: www.epsilon-imaging.com

Epsilon Imaging is developing vendor-neutral Computer-Aided Visualization and Analysis (CAVA) software applications for cardiovascular ultrasound. Our initial application, Epsilon CAVA for Stress Echo, assists echocardiologists to efficiently indicate specific areas of abnormality ultimately improving confidence in stress echocardiology.



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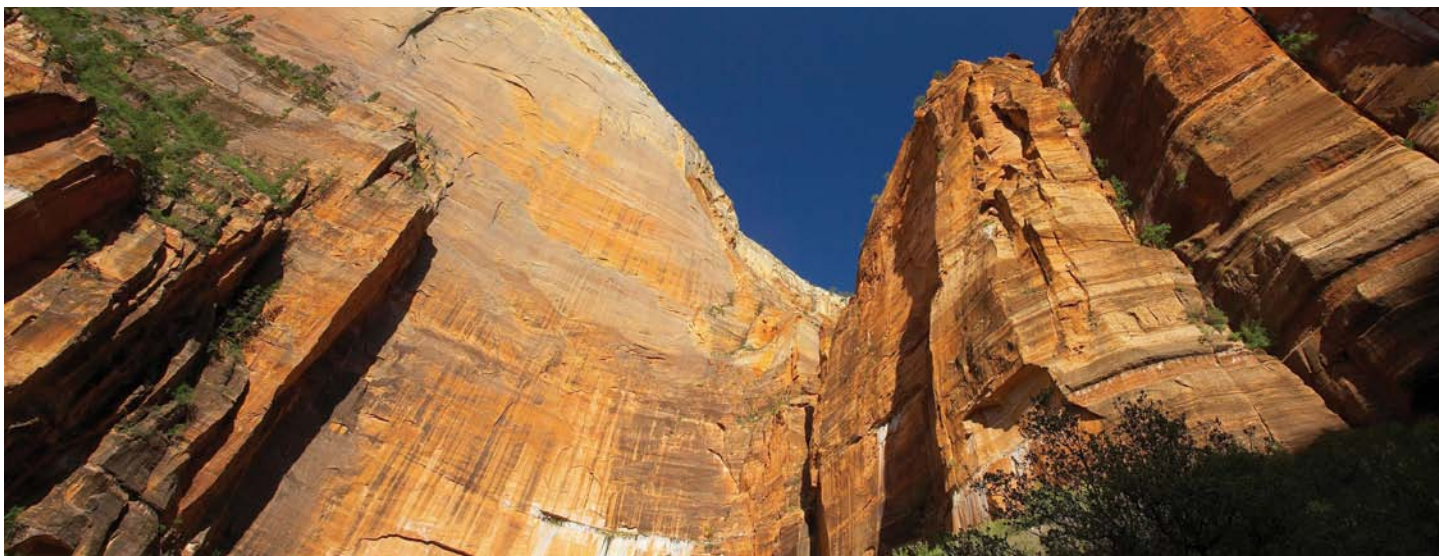
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