ASE 2013

AMERICAN SOCIETY OF ECHOCARDIOGRAPHY

FINAL PROGRAM

24TH ANNUAL Scientific Sessions • June 29 - July 2, 2013
MINNEAPOLIS CONVENTION CENTER, MINNEAPOLIS, MN
WWW.ASESCIENTIFICSESSIONS.ORG

DISEASE BASED FOCUS ON THE ROLE OF ECHO IN DIAGNOSIS AND GUIDING THERAPY
Across a variety of patient types with suboptimal echoes and multiple clinical settings...

Please Visit Booth 715

People and images depicted are for illustrative purposes only.
A DEFINITY® echo—
Giving You a Diagnostic Advantage in Suboptimal Echoes for Improved Patient Management

In a study by Kurt et al. DEFINITY®...

- Significantly increases the percentage of evaluable segments, indicating a consistent diagnostic advantage
- Enhances the quality of suboptimal echoes, which may result in more accurate and efficient diagnosis
- Results in important alterations in medical management and avoidance of additional diagnostic procedures

DEFINITY® has a proven safety profile and has been used in more than 4 million patients.

Baseline Echo 
DEFINITY® Echo

*Activated DEFINITY® (Perfluorane Lipid Microsphere) Injectable Suspension.

Please see accompanying brief summary, including boxed WARNING regarding serious cardiopulmonary reactions.

INDICATIONS
Activated DEFINITY® (Perfluorane Lipid Microsphere) Injectable Suspension is indicated for use in patients with suboptimal echocardiograms to opacify the left ventricular chamber and to improve the delineation of the left ventricular endocardial border.

CONTRAINDICATIONS
Do not administer DEFINITY® to patients with known or suspected right-to-left, bi-directional or transient right-to-left cardiac shunts, by intra-arterial injection, or to patients with known hypersensitivity to perfluorane.

IMPORTANT SAFETY INFORMATION

WARNING: Serious Cardiopulmonary Reactions
Serious cardiopulmonary reactions, including fatalities, have occurred uncommonly during or following perfluorane-containing microsphere administration [See WARNINGS AND PRECAUTIONS (5.1)]. Most serious reactions occur within 30 minutes of administration.

- Assess all patients for the presence of any condition that precludes DEFINITY® administration [See CONTRAINDICATIONS (4)].
- Always have resuscitation equipment and trained personnel readily available.

In postmarketing use, rare but serious cardiopulmonary or anaphylactoid reactions have been reported during or shortly following perfluorane-containing microsphere administration [See ADVERSE REACTIONS (6)] The risk for these reactions may be increased among patients with unstable cardiopulmonary conditions [See Postmarketing Experience (6.2)]. It is not always possible to reliably establish a causal relationship to drug exposure due to the presence of underlying cardiopulmonary disease.


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**DESCRIPTION**
DEFINITY® (Perflutren Lipid Microsphere) Injectable Suspension is an ultrasound contrast agent. The DEFINITY® vial contains components that upon activation yield perflutren lipid microspheres, a diagnostic drug that is intended to be used for contrast enhancement during the indicated echocardiographic procedures. The vial contains a clear, colorless, sterile, non-pyrogenic, hypotonic liquid, which upon activation with the aid of a VIAŁMIX®, provides a homogeneous, opaque, milky white injectable suspension of perflutren lipid microspheres. The suspension of activated DEFINITY® is administered by intravenous injection.

**INDICATIONS AND USAGE**
Activated DEFINITY® (Perflutren Lipid Microsphere) Injectable Suspension is indicated for use in patients with suboptimal echocardiographic procedures to opacify the left ventricular chamber and to improve the delineation of the left ventricular endocardial border.

**CONTRAINDICATIONS**
Do not administer DEFINITY® to patients with known or suspected:
- Right-to-left, bi-directional, or transient right-to-left cardiac shunts
- Hypersensitivity to perflutren [see WARNINGS AND PRECAUTIONS]

Do not administer DEFINITY® by intra-arterial injection.

**WARNINGS AND PRECAUTIONS**
Serious Cardiopulmonary Reactions:
Serious cardiopulmonary reactions, including fatalities, have occurred uncommonly during or following perflutren-containing microsphere administration [see WARNINGS AND PRECAUTIONS]. Most serious reactions occur within 30 minutes of administration.
- Assess all patients for the presence of any condition that precludes DEFINITY® administration [see CONTRAINDICATIONS].
- Always have resuscitation equipment and trained personnel readily available.

**ADVERSE REACTIONS**
Clinical Trials Experience
A total of 1716 subjects were evaluated during clinical trials of activated DEFINITY®. In this group, 1063 (61.9%) were male and 653 (38.1%) were female. 1328 (77.4%) were White, 258 (15.0%) were Black, 74 (4.3%) were Hispanic, and 56 (3.3%) were classified as other racial or ethnic groups. The mean age was 56.1 years (range 18 to 93). Of these, 1144 (66.8%) had at least one adverse reaction (Table 6.1). There were 26 serious adverse events and 15 (0.9%) subjects discontinued because of an adverse event.

Deaths and Serious Adverse Events
Among the 1716 DEFINITY® patients, 19 (1.1%) suffered serious cardiopulmonary adverse events including eight deaths. The deaths occurred several days after activated DEFINITY® administration and appeared to be related to the course of underlying disease. Of the 11 other serious adverse events, which appeared within days of the drug administration (2-15 days), all appeared to be a progression underlying cardiac and non-cardiac disease. However, a role for DEFINITY® in the initiation or course of these adverse events cannot be ruled out.

Discontinuations
There were 15 discontinuations reported with a mean age of 41.3 years. Nine of these patients were discontinued after the first injection. One patient experienced a hypersensitivity reaction with urticaria and pruritus and all the other patients experienced dizziness, chest pain, dyspnea or back pain. These adverse reactions appeared within minutes (1 - 15 min) of the drug administration and were of moderate intensity resolving usually without treatment within minutes or hours after onset.

For all adverse reactions, the overall incidence of adverse experiences was similar for the <65 year age group and the > 65 year age group, similar in males and in females, similar among racial or ethnic groups, and similar for bolus and infusion dosing. Table 6.1 summarizes the most common adverse reactions.

**POSTMARKETING EXPERIENCE**
In a prospective, multicenter, open-label registry of 1053 patients receiving DEFINITY® in routine clinical practice, heart rate, respiratory rate, and pulse oximetry were monitored for 30 minutes after DEFINITY® administration. No deaths or serious adverse reactions were reported, suggesting that these reactions are unlikely to occur at a rate of more than 0.3% when DEFINITY® is used according to recommendations.

The following adverse reactions have been identified during the post-marketing use of perflutren-containing microsphere products. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

**OVERDOSAGE**
The clinical consequences of overdosing with activated

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**Table 6.1 Con't**

<table>
<thead>
<tr>
<th>All activated DEFINITY® (N=1716)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central and peripheral nervous system disorder</td>
</tr>
<tr>
<td>Headache</td>
</tr>
<tr>
<td>Dizziness</td>
</tr>
<tr>
<td>Gastrointestinal system</td>
</tr>
<tr>
<td>Nausea</td>
</tr>
<tr>
<td>Vascular (extracardiac) disorders</td>
</tr>
<tr>
<td>Flushing</td>
</tr>
</tbody>
</table>

**Table 6.1**

<table>
<thead>
<tr>
<th>Total Number of Adverse Reactions</th>
<th>All activated DEFINITY® (N=1716)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Subjects with an Adverse Reaction</td>
<td>144 (8.4%)</td>
</tr>
</tbody>
</table>

**Body system**

<table>
<thead>
<tr>
<th>Preferred term</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Site Disorders</td>
<td>11 (0.6)</td>
</tr>
<tr>
<td>Injection Site Reactions</td>
<td>11 (0.6)</td>
</tr>
</tbody>
</table>

| Body as a Whole | 41 (2.4) |
| Back/renal pain | 20 (1.2) |
| Chest pain | 13 (0.8) |

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Anaphylactic/anaphylactoid reaction, anaphylactic shock, hypersensitivity, bronchospasm, throat tightness, angioedema, edema (pharyngeal, palatal, mouth, peripheral, localizable), swelling (face, eye, lip, tongue, upper airway, facial hypoaesthesia, rash, urticaria, pruritus, flushing, and erythema have occurred in patients with no prior exposure to perflutren-containing microsphere products [see ADVERSE REACTIONS].
DEFINITY® are not known. Treatment of an overdose should be directed toward the support of all vital functions and prompt institution of symptomatic therapy [see CONTRAINDICATIONS and WARNINGS AND PRECAUTIONS].

DOSEAGE AND ADMINISTRATION
DEFINITY® is intended for administration only after activation in the VIALMIX® apparatus. Before injection, this product must be activated and prepared according to the instructions outlined below. The VIALMIX® apparatus should be ordered from Lantheus Medical Imaging, 331 Treble Cove Road, North Billerica, MA, 01862. For customer orders call 1-800-299-3431.

DEFINITY® may be injected by either an intravenous (IV) bolus or infusion. The maximum dose is either two bolus doses or one single intravenous infusion. The safety of bolus and infusion dosing in combination or in sequence, has not been studied.

Bolus
The recommended bolus dose for activated DEFINITY® is 10 microL/kg of the activated product by intravenous bolus injection within 30-60 seconds, followed by a 10 mL saline flush. If necessary, a second 10 microL/kg dose followed by a second 10 mL saline flush may be administered 30 minutes after the first injection to prolong contrast enhancement.

Infusion
The recommended infusion dose for activated DEFINITY® is via an IV infusion of 1.3 mL added to 50 mL of preservative-free saline. The rate of infusion should be initiated at 4.0 mL/minute, but titrated as necessary to achieve optimal image enhancement, not to exceed 10 mL/minute.

Imaging
After baseline non-contrast echocardiography is completed, set the mechanical index for the ultrasound device at 0.8 or below [see WARNINGS AND PRECAUTIONS]. Then inject activated DEFINITY® (as described above) and begin ultrasound imaging immediately. Evaluate the activated DEFINITY® echocardiogram images in combination with the non-contrast echocardiogram images. In a crossover trial of 64 patients randomized to both bolus and infusion, the duration of clinically useful contrast enhancement for fundamental imaging was approximately 5.4 minutes after a 10 microL/kg bolus and was approximately 7.1 minutes during the continuous infusion of 1.3 mL activated DEFINITY® in 50 mL saline at a rate of 4 mL/min.

DEFINITY® Activation, Preparation and Handling Instructions
1. Allow the vial to warm to room temperature before starting the activation procedure.
2. Activate DEFINITY® by shaking the vial for 45 seconds using a VIALMIX®. Note: illustrations of this procedure are contained in the VIALMIX® Users Guide.
   - Do not use this drug unless it has completed a full 45 second activation cycle in the VIALMIX®. DEFINITY® will not be properly activated unless the full 45 second activation cycle is completed. Do not reactivate the vial if VIALMIX® did not complete a full 45 second cycle. Do not reactivate a successfully activated DEFINITY® vial (see step 3).
   - Do not use a VIALMIX® that is not functioning properly. Refer to the “VIALMIX® User’s Guide” for the “VIALMIX® calibration and replacement procedures” to ensure that a properly functioning VIALMIX® is used.
3. Immediately after activation in the VIALMIX®, activated DEFINITY® appears as a milky white suspension and may be used immediately after activation. If the product is not used within 5 minutes of VIALMIX® activation, the microspheres should be resuspended by 10 seconds of hand agitation by inverting the vial before the product is withdrawn in a syringe. The activated DEFINITY® may be used for up to 12 hours from the time of VIALMIX®, but only after the microspheres are resuspended by hand agitation. Store the activated DEFINITY® at room temperature in the original product vial.
4. Invert the vial and withdraw the activated milky white suspension using the Intellispin™ (Dispensing Pin) or 18 to 20 gauge syringe needle. Withdraw the material from the middle of the liquid in the inverted vial. Do not inject air into the DEFINITY® VIAL.
5. Use the product immediately after its withdrawal from the vial; do not allow the product to stand in the syringe.

How Supplied/Storage and Handling
How Supplied
DEFINITY® is supplied as a single use 2-mL clear glass vial containing clear liquid. Each package (clear plastic clamshell) contains four (4) single-use vials.

Storage and Handling
Store between 2-8°C (36°-46°F).

PATIENT COUNSELING INFORMATION
Patients receiving activated DEFINITY® should be instructed to inform their healthcare provider if they:
1. have a congenital heart defect, or recent worsening of heart or lung conditions [see CONTRAINDICATIONS and WARNINGS AND PRECAUTIONS].
2. have had prior reactions to DEFINITY® [see CONTRAINDICATIONS].
3. may be pregnant, are trying to become pregnant, or are nursing [see USE IN SPECIFIC POPULATIONS].

All Other Business: 800-362-2668
(For Massachusetts and International, call 978-667-9531)
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Are you maximizing on the return of your investment? When invested in us, this is how we are investing in you.
Gagnon Cardiovascular Institute and Morristown Medical Center are proud to recognize Linda D. Gillam, MD as the recipient of ASE’s 2013 Meritorious Service Award.

Linda D. Gillam, MD, MPH, FACC, FAHA, FASE
Chair, Cardiovascular Medicine
Atlantic Health System
DEAR FRIENDS AND COLLEAGUES,

It is my pleasure to welcome you as Chair and on behalf of the 24th Annual Scientific Sessions Program Committee, to the beautiful city of Minneapolis. We hope that you enjoy your time here both during and after the sessions.

This year, we have worked hard to focus the education on both the diagnosis and management of disease and the team-based approach to echocardiography. ASE 2013 stresses a case-based format with more time allotted during the sessions to ask questions of the faculty. In the Symposia track we have sessions that concentrate on specific disease states as well as more complex topics. The Imaging Essentials track will give you practical information on imaging specific structures of the heart. Our always popular Pediatric and Congenital track stretches over all four days and this year includes two joint adult/pediatric sessions. We’ve also included some live scanning sessions so you will have the opportunity to learn how to optimize acquisition and quantification while in real time.

There are some other special sessions we wanted to bring to your attention. On Saturday, we have a symposium, “Multidisciplinary Approach to Complex Intraoperative Decision Making” that will feature interactive panel discussions, porcine heart dissection and multimedia presentations that explore mitral valve disease. In addition, Partho Sengupta, MBBS, MD, DM, FASE of The Mount Sinai Medical Center, New York, NY, has been awarded the 2013 Feigenbaum Lectureship. On Monday, his talk, “Intelligent Platforms for Disease Assessment: Novel Approaches in Functional Echocardiography,” will feature ASE’s first-ever holographic presentation! And, Echo Jeopardy is back for fun and learning featuring a team-based competition.

You won’t want to leave early because Tuesday brings a day full of exciting sessions. ASE has invited world renowned experts to discuss how intense athletic training impacts the cardiovascular system in the “Athlete’s Heart: 360 Perspective”. Dr. Colette Veyrat will present the first annual Kalmanson Lecture on Doppler Echocardiography, titled “Daniel Kalmanson, a Pioneer Leading the Way to Flow Doppler into the Heart”. We are again focusing on optimizing your knowledge of the business of medicine with two Practice management related sessions on Tuesday afternoon, “Healthcare Trends” presented by MedAxiom Consulting and “Effects of the Changing Healthcare Environment on Cardiac Ultrasound.” You should also plan to enjoy the variety of social events offered this year. Please join the Program Committee and ASE President Patricia Pellikka, MD, FASE, as we toast the opening of ASE 2013 on Saturday afternoon at 4:30 pm in the Exhibit and Poster Hall. We will also be hosting a networking reception on Sunday at 5:30 pm on the beautiful grounds of the Minneapolis Convention Center. In addition, there are plenty of opportunities to visit with our vendors during the coffee and lunch breaks on Sunday and Monday.

Our goal is to help you be the best practitioner you can be and we hope that this program will assist you in meeting your everyday clinical needs, while exciting you to the advances in the field of echocardiography.

Thank you for joining us and welcome to ASE 2013!

Patricia Pellikka, MD, FASE
ASE President

Judy Hung, MD, FASE
ASE 2013 Program Chair
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. Non-member attendees will receive a complimentary ASE membership through December 31, 2013, with their registration for the ASE 24th Annual Scientific Sessions.

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ATTENDEE REGISTRATION

The registration counter will be located on the First Floor Level of the Minneapolis Convention Center. Attendees may pick up their conference materials, including name badge and tickets purchased at this location.

ASE Faculty and Attendee Registration Counter Hours:
- Friday, June 28 ....................................... 12:00 pm–7:00 pm
- Saturday, June 29 ..................................... 6:30 am–6:30 pm
- Sunday, June 30 ....................................... 6:30 am–6:30 pm
- Monday, July 1 ......................................... 6:30 am–6:30 pm
- Tuesday, July 2*......................................... 6:30 am–5:00 pm
*The registration counter will be located in the ASE Marketplace on Tuesday, July 2nd.

Ticket Distribution

Please note that some sessions require a purchased ticket for admission. Ticketed Breakfast Sessions require a purchased ticket; seating is limited and based on availability. If these sessions are not sold-out, tickets can be purchased at the ASE Registration Counter during registration hours.

Speaker Ready Room

The Speaker Ready Room is located in 205 AD. Faculty name badges will be available at the ASE Registration Counter during registration hours. The Speaker Ready Room will be staffed with technicians to assist faculty with uploading and previewing presentations as follows:
- Friday, June 28 ....................................... 4:00 pm–7:00 pm
- Saturday, June 29 ..................................... 6:00 am–4:30 pm
- Sunday, June 30 ....................................... 6:30 am–4:30 pm
- Monday, July 1 ......................................... 6:30 am–4:30 pm
- Tuesday, July 2 ......................................... 6:30 am–3:00 pm

Name Badges

Admission to the Sessions, ASE Exhibit & Poster Hall and Science & Technology Theatre is by badge only. Please wear your name badge at all times when in the Convention Center. However, we recommend for your safety that name badges not be worn outside of the Convention Center. ASE exhibitors may use a lead retrieval system in the Exhibit & Poster Hall or Science & Technology Theatre to obtain your information. Your name badge also functions as your exhibit badge, providing exhibitors with your name, institution (where applicable), address, business telephone number and e-mail address. ASE will not release e-mail addresses of attendees who declined this option on their registration form. Family members with guest badges will be admitted to the Exhibit & Poster Hall and may sit in on non-ticketed educational sessions as space allows, but they are not eligible for a conference bag or to claim CME/CEU credit. Guests must be at least 12 years of age.

You may purchase guest badges for family members at the ASE Registration Counter. ASE reserves the right to revoke or deny attendance to any registered participant, speaker, exhibitor, news media reporter or photographer at presentations or activities during the ASE 24th Annual Scientific Sessions.

PLEASE NOTE:
There is a $50 replacement fee for lost name badges. Photo ids or other identification will be required to renew the badge.

Claiming Continuing Education Credit

Certificates for CME/CEU credit are available online following the conference. Credit should be claimed one time only on your final day of participation, and should not be applied for on a daily basis. Separate certificates will not be issued for your attendance at Ticketed Breakfast Symposia, and as such, you should include your participation in these sessions in your credit hours. CME/CEU credit is based on an honor system and credits claimed should only reflect the extent of your participation in the meeting. Industry Science and Technology sessions are not applicable for CEU/CME credit.
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Houston, TX

**Roberto Lang, MD, FASE**  
University of Chicago Medical Center  
Chicago, IL

**Sanjiv Kaul, MD, FASE**  
Oregon Health and Science University  
Portland, OR
**Friday, June 28, 2013**

Council on Pediatric and Congenital Heart Disease Board  
6:00 pm – 9:30 pm  
Room 200H

**Saturday, June 29, 2013**

JASE Editorial Board  
8:30 am – 10:00 am  
Room 200FG

Nominating Committee  
11:00 am – 12:00 pm  
Room 200B

Core Lab Directors Meeting  
11:00 am – 12:30 pm  
Room 200FG

Awards Committee  
12:00 pm – 1:00 pm  
Room 200B

International Relations Task Force  
1:30 pm – 3:00 pm  
Room 200A

**Sunday, June 30, 2013**

Council on Perioperative Echocardiography Board  
9:00 am – 10:00 am  
Room 200D

Guidelines and Standards Committee  
9:00 am – 11:00 am  
Room 200H

Initiative to Standardize Deformation Imaging  
9:00 am – 11:00 am  
Room 200FG

Education Committee  
10:00 am – 11:30 am  
Room 200A

FASE Committee  
10:00 am – 11:30 am  
Room 200B

**Monday, July 1, 2013**

Advocacy Committee  
8:30 am – 10:00 am  
Room 200FG

Source of Embolism Writing Group  
9:00 am – 10:00 am  
Room 200B

Council on Cardiovascular Sonography Board Meeting  
12:00 pm – 2:00 pm  
Room 200FG

Bylaws and Ethics Committee  
1:00 pm – 2:00 pm  
Room 200D

CME Committee  
1:00 pm – 2:30 pm  
Room 200E

International Sonographer Training Task Force  
1:30 pm – 3:00 pm  
Room 200B

**Tuesday, July 2, 2013**

Finance Committee  
9:00 am - 10:00 am  
Room 200A

Scientific Sessions Program Committee  
11:30 am – 1:00 pm  
Room 200A

Pediatric Echocardiography Lab Directors Meeting  
11:45 am – 1:00 pm  
Room 200FG

Research Committee  
2:00 pm – 4:00 pm  
Room 200C

Industry Roundtable Committee Meeting  
3:00 pm – 5:00 pm  
Room 200D

ASE Foundation Task Force  
11:00 am – 12:00 pm  
Room 200D

Ischemia Trial  
12:00 pm – 1:30 pm  
Room 200A

CoA-ACS Board of Directors  
1:00 pm – 2:00 pm  
Room 200B

Council on Vascular Ultrasound Board  
1:30 pm – 2:30 pm  
Room 200A

Research Awards Committee  
1:30 pm – 3:00 pm  
Room 200D

Membership Committee  
1:30 pm – 3:00 pm  
Room 200E
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Tuesday, July 2: 9:30 am – 2:00 pm Room 205 BC

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Take a free ride
Free bus rides are available on Nicollet Mall in downtown Minneapolis and to and from the Minneapolis Convention Center (MCC). This gives you an easy way to go from one end of town to the other – for free! The free service on selected routes between Grant Street and Washington Avenue is offered on buses marked “Free Ride.” Other buses on Nicollet – and all within the Downtown Zone – charge 50¢. Free-ride buses leave every 10 minutes on weekdays and every 15 to 30 minutes on weekends. Buses on Nicollet stop every other block between 5th and 13th Streets.

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Please visit Hall C next to the Exhibit & Poster Hall should you need to store luggage while at the convention center. Storage is $3.00 per bag.

Business Center
The on-site FedEx Office Business Center offers a variety of services right from the main floor of the Minneapolis Convention Center. Your shipping, copy, binding, printing and signage needs can be handled on-site prior to or during your event. From last minute supplies to overnight shipping, the Business Center is available to serve your business demands.

FedEx Office Business Center Hours
• Monday - Friday, 8 am - 5 pm
• Saturday - Sunday, 8 am - 4 pm
**Food Functions**

ASE will provide continental breakfast in the Convention Center Foyer from 7:00 am – 8:00 am daily. Morning and afternoon coffee breaks are available for registered attendees in the Exhibit & Poster Hall Sunday, June 30 and Monday, July 1, and in the Convention Center Foyer on Saturday, June 29 and Tuesday, July 2. Please refer to the Schedule-at-a-Glance on page 21 for the times of the daily morning, afternoon and lunch breaks.

ASE will provide lunch on a first-come, first serve basis (max. 350 participants) for Science & Technology Theatre attendees held in Room 101. See page 91 of this program for a detailed theatre schedule.

**Internet Access**

ASE thanks Cardiovascular Credentialing International™ (CCI), booth #911, for sponsoring the E-mail Station. The E-mail Station is located adjacent to CCI in booth #913 in the Exhibit & Poster Hall. Printers for attendee use are also available at the E-mail Station. Complimentary wifi is available in the public areas of the Minneapolis Convention Center.

**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 them 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 in the convention center. Be sure to remove your badge when you leave the convention center.

**News Media**

For information regarding news releases, news conferences and interviews, please visit the ASE Registration Counter. Media representatives must display their official ASE badge at all times. Please see our Photography and Audio/Visual Recording policy.

**Photography and Audio / Visual Recording Policy**

No person may record any portion of the ASE 2013 Scientific Sessions, either by video, still or digital photography, audio or any other recording or reproduction mechanism. This includes recording of presentations and supporting A/V materials and of poster presentations and supporting poster materials. Taking photos of or recording the content of meeting room 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 conference badge and privileges. ASE reserves the rights to all recordings or reproductions at ASE meetings. Please be aware that during the Scientific Sessions, attendees, vendors, guests and exhibitors may be photographed or videotaped by ASE contractors 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**

Information about childcare is available at your hotel’s concierge desk. ASE does not offer childcare services. Due to limited seating capacity and the highly technical nature of the program, children are not allowed to attend sessions. For their safety, children must be accompanied by an adult at all times during the ASE 2013 Scientific Sessions. Children 12 and older must have a purchased guest registration before they will be allowed entry into the Exhibit & Poster Hall. Children 11 and younger, strollers, and infant carriers are not permitted on the exhibit floor at any time.
ASE Headquarters is Booth #515 in the Exhibit & Poster Hall at ASE 2013

VISIT US TO PURCHASE PRODUCTS, UPDATE YOUR MEMBERSHIP AND LEARN ABOUT ASE ONLINE RESOURCES

If you missed Exhibit & Poster Hall hours, check out the MarketPlace kiosk located by ASE’s registration counter.

Learn more about ASE apps for your smartphone:

► iASE
► ASE Mobile Membership app
► ASE Pocket Guidelines app

Visit www.ASEMarketPlace.com for a full listing of ASE products and career opportunities.
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<tr>
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**Target Audience**
The ASE 24th Annual Scientific Sessions will benefit all healthcare providers interested in the application of cardiovascular ultrasound imaging in the care of patients. Participants in all areas of cardiovascular ultrasound imaging and at all levels of experience will find sessions that meet their needs and help improve their practice. High quality lectures, debates, hands-on sessions and poster presentations offer a broad spectrum of educational opportunities in both large and small group settings. Adult and pediatric cardiologists, cardiothoracic and vascular surgeons, cardiac anesthesiologists, cardiac sonographers, and emergency and critical care physicians, as well as hospitalists, radiologists, research scientists, residents and fellows in training, students, and nurses, are encouraged to participate actively in sessions and interact with available faculty, get a broad overview of all topics, or delve deeply into one or two topics. In addition, particular care has been taken to incorporate ASE guidelines into talks that will demonstrate how and why they should be applied in your daily practice.

**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 the diagnosis and treatment options of a specific patient’s condition.

**Disclosure**
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 relationship that could possibly conflict with the educational value of the program be resolved prior to the educational session and disclosed to the audience. In accordance with these policies, ASE implemented mechanisms prior to the planning and implementation of this CME activity to identify and resolve conflicts of interest for all individual in a position to control content.

Disclosure information is referenced and coded and can be found beginning on page 113 of this program.

**Commercial Support Disclosure Statement**

**Educational Grants:** This activity is supported in part by educational grants from: Abbott Laboratories, Actelion Pharmaceuticals US, Inc., Boston Scientific, Lantheus Medical Imaging, Medtronic and Sorin Group

**In-Kind Donations:** This activity is supported in part by in-kind donations from: GE Healthcare (scanning equipment), Philips Healthcare (scanning equipment) and Toshiba (scanning equipment).

**Conference Objectives**
To provide:

- A comprehensive review of current equipment and techniques in cardiac ultrasound for the assessment of patients with a variety of cardiovascular conditions.
- An update of guidelines and recent advances in technology and research for the assessment of patients with cardiac and vascular disease.
- A review of fundamental and advanced interpretation of cardiac and vascular ultrasound and the impact of echocardiographic imaging on patient care and outcomes.
- Sessions that are appropriate for all levels of cardiac and vascular ultrasound professionals, including experts, intermediate learners, sonographers, fellows, and nurses.

After participating in this activity, attendees will be better able to:

- Utilize cardiac and vascular ultrasound for the comprehensive assessment and management of cardiovascular diseases including, but not limited to: valvular heart disease, coronary artery disease, cardiomyopathies, pericardial disease and congenital heart disease.
- Incorporate new guideline recommendations into clinical practice.
Conferences Objectives (continued)

- Identify the limitations of the cardiovascular ultrasound technique to improve the accuracy of interpretation.
- Recognize the recent advancements and future direction of cardiac and vascular ultrasound and the impact these advancements may have on patient care.
- Integrate the latest technical developments into clinical practice.
- Employ cardiac ultrasound in pre-procedural, intraprocedural, and post-procedural care of patients in the operating room and catheterization laboratory.
- Recognize the utility of multimodality imaging (nuclear imaging, CMR and CTA) in the evaluation of patients with hypertrophic cardiomyopathy, pericardial disease and coronary artery disease.
- Delineate how the new changes in the healthcare delivery system affect the private and hospital-based practice of cardiology and cardiovascular imaging.
- Explain ways to begin and establish a successful career as a clinical investigator.

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 American Society of Echocardiography 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 27.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Approved by the American College of Emergency Physicians for a maximum of 13.50 hour(s) of ACEP Category I credit.

This activity has been approved for 15 British Society of Echocardiography (BSE) reaccreditation points.

The American Medical Association has determined that non-US licensed physicians who participate in this educational activity are eligible for AMA PRA Category 1 Credits™. ARDMS and CCI recognize ASE’s certificates and have agreed to honor the credit hours toward their registry requirements for sonographers.

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

The National Board of Echocardiography™ (NBE) requires 15 hours of echocardiography-specific CME for both ReASCE® and RePTE® recertification. This activity contains 27.5 AMA PRA Category 1 Credits™ that can be used toward recertification requirements.
Science & Technology Theatre....Saturday, Sunday and Monday Lunch
Room 101
Last year, these events were packed with interested professionals wanting to find out the latest information on Industry perspective. Lunch is provided by ASE and is included in your registration fee, but space and boxed lunches are first-come, first-served. The registration process will be handled by the company hosting each session. Industry supported symposia sessions are independently planned and are not a part of the official ASE 24th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed or affiliated with ASE. These sessions are not eligible for CME credit.

SATURDAY, JUNE 29

Live Scanning Session ......................... 3:00 pm - 4:30 pm
Ballroom B
This hand-held echo session will focus on Line Placement/Lungs, Abdomen/Aorta and LV/ RV Function. Don’t miss seeing this hands-on demonstration. In-Kind Support Disclosure: Thank you to GE Healthcare for providing the equipment for this session.

President’s Reception ....................... 4:30 pm - 6:30 pm
Exhibit & Poster Hall
All attendees are invited to celebrate ASE 2013 at the President’s Reception, hosted by ASE President, Patricia Pellikka, MD, FASE. This is your first opportunity to network with colleagues and friends while learning more about the newest equipment and services in the cardiovascular field. Complimentary hors d’oeuvres and cocktails will be available from many stations throughout the hall. Admission is included in your registration fee and guest tickets can be purchased during the registration process.

ASE Foundation 4th Annual Awards Gala ... 7:00 pm - 11:00 pm
Windows on Minnesota
This event celebrates the 2013 Award Winners while supporting research grants given through the ASE Foundation. Tickets are required for this sold-out event.

SUNDAY, JUNE 30

ASE 5K Run/1mile Walk co-sponsored by SIEMENS, ARDMS and IAC ....................... 6:00 am - 7:00 am
Minneapolis Convention Center, Entrance #1
Come have some fun in the sun while doing something healthy during the ASE Annual Scientific Sessions! ASE 2013 registered attendees can visit Siemens’ booth #901 in the Exhibit & Poster Hall on Saturday, June 29 from 4:30 pm - 6:30 pm for race packet pick-up. All other runners/walkers need to visit the race website for packet pick-up details. Only ASE 2013 registered attendees are authorized to enter the Exhibit & Poster Hall.

24th Annual Edler Lecture ..................... 3:30 pm - 5:30 pm
Main Auditorium
Dr. James D. Thomas, Past President of ASE, and a Cleveland Clinic cardiologist, will present his lecture, “The Miracle of Echocardiography: From Physics to Physiology to Population Health.”

Welcome Reception ......................... 5:30 pm - 6:30 pm
Outdoor Lawn
Enjoy a lovely summer evening at a complimentary outdoor welcome reception only steps from your sessions. Enjoy the gorgeous Minneapolis weather while conversing with colleagues and friends.

MONDAY, JULY 1

Early Career and Fellow Physician
Meet and Greet .................. 9:30 am – 10:30 am
Exhibit & Poster Hall
Fellows, early career physicians and scientists are invited to come network with your peers, learn more about leadership and research grant opportunities. You will also have a chance to speak with ASE leaders including ASE’s incoming President, Benjamin Byrd, MD, FASE and Vice-President, Neil Weisman, MD, FASE.

2013 Arthur E. Weyman Young Investigator’s Award Competition and Annual Feigenbaum Lecture .... 10:15 am - 11:45 am
Main Auditorium
Partho Sengupta, MBBS, MD, DM, FASE, of The Mount Sinai Medical Center, New York, NY, has been named the 14th Annual Feigenbaum Lecturer. ASE is proud to recognize Dr. Sengupta’s significant contributions to research in the field of echocardiography and his potential to continue at a high level of achievement at this year’s Scientific Sessions.
You will not want to miss his talk, “Intelligent Platforms for Disease Assessment: Novel Approaches in Functional Echocardiography,” featuring ASE’s first-ever holographic presentation! The 2013 Arthur E. Weyman Young Investigator’s Award Competition, supported by the National Board of Echocardiography™ (NBE) in honor of their first president, Arthur E. Weyman, MD, FASE, will also be held during this time. Four outstanding young investigators will present their research and compete for first prize.

**Live Scanning Session .............................. 1:15 pm - 2:45 pm**
*Ballroom B*
This session will focus on aortic stenosis, scanning for mitral regurgitation and how to get LVOT gradient while avoiding the MR. In-Kind Support Disclosure: Thank you to Philips Healthcare for providing the equipment for this session.

**TUESDAY, JULY 2**

**Clash of the Titans:**
Debates Between the Greats ............... 8:00 am - 9:30 am
*Main Auditorium*
This session will address clinically important questions with debates, “Can Echo Reliably Assess LV Filling Pressures?” and “Low Flow, Low Gradient AS: Does it Exist? Does AVR Help?” and “Should Echo be Done in Screening for Athletes?” Don’t miss ASE 2013 luminary faculty as they debate the hottest topics in cardiovascular ultrasound.

**Live Scanning Session .............................. 8:00 am – 9:30 am**
*Ballroom A*
This is a joint pediatric/adult session that will focus on segmental anatomy in a patient with congenital heart disease. In-Kind Support Disclosure: Thank you to Toshiba for providing the equipment for this session.

**Athlete’s Heart: 360 Perspective ....... 10:00 am - 11:30 am**
*Main Auditorium*
ASE has invited world renowned experts to discuss how intense athletic training impacts the cardiovascular system. Issues addressed will be: Physiology of Training on Heart: How Does the Heart Adapt? Sudden Death in Athletes: What are the Causes?, Can Imaging Help?, The Marathon: Endurance vs. High-Intensity Training, and a Perspective from a National Football League Team Physician.

**Interpreting with the Masters ......... 1:00 pm - 2:30 pm**
*Main Auditorium*
Invited presenters include Alan Pearlman, Jamil Tajik, Navin Nanda, Colette Veyrat, and Marcia Barbosa who will share their most challenging cases. In addition Dr. Veyrat will present the first annual Kalmanson Lecture on Doppler Echocardiography, ”Daniel Kalmanson: A Pioneer Leading the Way to Flow Doppler into the Heart”.

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**PHILIPS**

**Exhibit Hall Closing Reception ............ 2:45 pm - 3:30 pm**
*Exhibit & Poster Hall*
Monday’s afternoon break will consist of a farewell reception in the Exhibit & Poster Hall. To show gratitude to everyone involved in the ASE 24th Annual Scientific Sessions, ASE is pleased to offer one final opportunity in Minneapolis for attendees and industry representatives to network with colleagues and friends while enjoying complimentary cocktails and other refreshments.

**Echo Jeopardy ................................. 5:00 pm - 6:30 pm**
*Main Auditorium*
Back by popular demand! Join host John Gorcsan III, MD, FASE, as he moderates the competition’s outstanding team line-ups. Competitors testing their knowledge against their peers include:
- Miguel Quiñones and Linda Gillam
- Bill Armstrong and Bonita Anderson
- Pepe Zamorano and Joachim Nesser
2013 EDLER LECTURE

James D. Thomas, MD, FASE, of the Robert and Suzanne Tomsich Department of Cardiovascular Medicine, at the Sydell and Arnold Miller Family Heart & Vascular Institute at Cleveland Clinic, will present the 24th Annual ASE Scientific Sessions Edler Lecture. Dr. Thomas is the Lead Scientist for Ultrasound to the National Aeronautics and Space Administration (NASA) and Past President of the ASE. His specialty interest is echocardiography.

Created in 1990, the annual Edler Lecture honors the founder of echocardiography, Dr. Inge Edler. Dr. Thomas will present his lecture titled “The Miracle of Echocardiography: From Physics to Physiology to Population Health,” during the ASE Business Meeting and Awards Presentations, Sunday, June 30, in the Main Auditorium.

2013 FEIGENBAUM LECTURER

Partho P. Sengupta, MBBS, MD, DM, FASE, of The Mount Sinai Medical Center in New York, NY, has been named the 14th Annual Feigenbaum Lecturer. The Feigenbaum Lecture was named in honor of the founder and first president of ASE, Harvey Feigenbaum, MD, FASE. This lectureship is awarded to a young investigator in recognition of his/her significant contributions to research in the field of echocardiography and his/her potential to continue at a high level of achievement. Dr. Sengupta will present his lecture entitled “Intelligent Platforms for Disease Assessment: Novel Approaches in Functional Echocardiography” during the 2013 Arthur E. Weyman Young Investigators’ Award competition and Annual Feigenbaum Lecture from 10:15 am – 11:45 am on Monday, July 1, in the Main Auditorium.

The ASE is pleased to recognize the following award recipients during the ASE Business Meeting and Awards Presentations from 3:30 pm – 5:30 pm on Sunday, June 30, in the Main Auditorium.

LIFETIME ACHIEVEMENT AWARD

The Lifetime Achievement Award recognizes individuals who have had a lifetime of outstanding achievements in the field of cardiovascular ultrasound and have served as a role model through service, research and teaching. These individuals have a career in cardiovascular ultrasound spanning at least 25 years and are recognized at local, national and international levels.

James B. Seward, MD, FASE, has been named as the 2013 Physician Lifetime Achievement recipient. Dr. Seward is the founder of EchoMetrics®, Rochester, MN, and former Director of the Echocardiography Laboratory at Mayo Clinic, Rochester, MN, from 1993 - 2002.

Alan D. Waggoner MHS, RDCS, has been named ASE’s 2nd Sonographer Lifetime Achievement recipient. Upon exiting the military in 1973 he began a long career in ultrasound that has spanned every aspect of cardiovascular ultrasound. He has served as the chief sonographer/technical director of multiple echo labs and he has worked with industry and in research. Alan served as Administrative/Technical Director at the Washington University School of Medicine’s Core Lab in St. Louis, MO prior to retiring. In 2002, ASE honored and recognized Alan’s contributions to education by naming of the “Alan D. Waggoner Cardiovascular Student Scholarship Awards. Alan also served on the JASE Editorial Board as Associate Editor and continues to serve as senior Consulting Editor. Alan has a 35 year history of service to ASE beginning in 1977. He has served as a mentor to sonographers, fellows, nurses, administrators and physicians. Even in retirement he continues to serve ASE and its members.

The ASE is pleased to recognize the following award recipients during the ASE Business Meeting and Awards Presentations from 3:30 pm – 5:30 pm on Sunday, June 30, in the Main Auditorium.
SPECIAL AWARDS

MERITORIOUS SERVICE AWARD

The ASE Meritorious Service Award recognizes individual members for their substantial and generous efforts to the Society’s betterment. The ASE is pleased to recognize this year’s recipient as Linda D. Gillam, MD, MPH, FASE, Chair, Cardiovascular Medicine, Atlantic Health System, Morristown, NJ. Dr. Gillam has a long and distinguished record of service to the society. She has been involved with many facets of ASE’s work, some of which include Chair of the Scientific Sessions, member of numerous committees and task forces, President of ASE, Guidelines author, and ASE’s representative to the ACC Imaging Council and Advocacy Committee. Dr. Gillam was an early advocate for the formation of the ASE Foundation and served as its first Chair.

RICHARD POPP EXCELLENCE IN TEACHING AWARD

Julio E. Perez, MD, FASE, from the Washington University School of Medicine, St. Louis, MO, has been named the 13th annual recipient of the Richard Popp Excellence in Teaching Award. Dr. Perez was nominated by his peers for his excellence in teaching and mentoring. The award is named in honor of ASE’s second president, Richard L. Popp, MD, FASE and recognizes physicians who epitomize the ideal qualities possessed by a mentor and role model.

COUNCIL ON PEDIATRIC & CONGENITAL HEART DISEASE FOUNDERS AWARD

Jack Rychik, MD, from the Children’s Hospital in Philadelphia, has been named the 13th recipient of the ASE Council on Pediatric & Congenital Heart Disease Founders Award. This award recognizes continued major scholarly contributions to the field of pediatric echocardiography. Dr. Rychik will present his lecture during the Founders Award Presentation on Saturday, June 29, 3:00 pm, in Ballroom A.

OUTSTANDING ACHIEVEMENT IN PERIOPERATIVE ECHOCARDIOGRAPHY AWARD

Jack S. Shanewise, MD, FASE, of Columbia University Medical Center, New York, NY, has been named the 1st recipient of the Outstanding Achievement in Perioperative Echocardiography Award. The ASE Council on Perioperative Echocardiography recognizes an individual who has made significant clinical, research and/or educational contributions to the development of the field of perioperative echocardiography with presentation of this award.

HONORARY FASE

The Fellow of the American Society of Echocardiography (FASE) designation recognizes individuals dedicated to cardiovascular ultrasound who exemplify the highest achievement in the profession. The International Relations Task Force, in conjunction with the ASE Executive Committee, nominated four individuals to receive an “Honorary FASE” designation in 2013. This honor was given to individuals who have made significant contributions to the field of cardiovascular ultrasound and have played strong roles in building international relationships with the Society.

The 2013 honorees are:

- Marcia Barbosa, MD, FASE
  Socor Hospital
  Belo Horizonte, Brazil

- Sabino Iliceto, MD, FASE
  University of Padova
  Padova, Italy

- Gerald Maurer, MD, FASE
  Medical University of Vienna
  Ludwig Boltzmann Institute for Cardiovascular Research
  Vienna, Austria

- Kiyoshi Yoshida, MD, PhD, FASE
  Kawasaki Medical School
  Kurashiki, Japan
2013 Arthur E. Weyman Young Investigator’s Award Finalists

The ASE Scientific Sessions Program Committee is pleased to recognize the finalists of the 2013 Arthur E. Weyman Young Investigator’s Award Competition, supported by the National Board of Echocardiography™ (NBE) in honor of their first president, Arthur E. Weyman, MD, FASE. These outstanding young investigators will present their research during the 2013 Arthur E. Weyman Young Investigator’s Award Competition and Annual Feigenbaum Lecture from 10:15 am - 11:45 am on Monday, July 1, in the Main Auditorium.

- **Kenya Kusunose, MD, PhD**, Cleveland Clinic, Cleveland, OH – “Impact of Vagal Nerve Stimulation on Left Atrial Structure and Function in a Canine Model of Tachycardia-induced Dilated Cardiomyopathy”
- **Shahryar M. Chowdhury, MD**, Medical University of South Carolina, Charleston, SC – “Differences in Lean Body Mass May Explain the Racial Disparities Seen in Carotid Intima-Media Thickness in Obese Children”
- **Sacha R. Bhatia, MD, MBA** Massachusetts General Hospital, Boston, MA – “An Educational Intervention Reduces the Rate of Inappropriate Transthoracic Echocardiograms in Ambulatory Care”
- **Alamelu Ramamurthi, MD**, Tufts Medical Center, Boston, MA – “Diverse Mechanisms are Responsible for Low Gradient in Severe Aortic Stenosis beyond Low Ejection Fraction and High Vascular Load”

2013 ASE Foundation Abstract Presenter Travel Grant Recipients

The ASE Foundation is pleased to recognize the following recipients of Abstract Presenter Travel Grants for attendance at the 24th Annual ASE Scientific Sessions. The presentation of original research from around the world illustrating exciting new developments in cardiovascular ultrasound is an integral component of this meeting, and each of these young presenters was awarded $700 toward his/her travel expenses.

- **Sujata Balulad, MD**, Albany Medical College, Albany, NY
- **Nirmanmoh Bhatta, MD**, University of Louisville, Louisville, KY
- **Ekaterina Borskaya, MD**, Federal State Clinical Hospital #86, Moscow, Russian Federation
- **Rachel-Maria Brown, MD**, Northwestern University Memorial Hospital, Chicago, IL

- **Alejandra Bueno, MD**, Boston Children’s Hospital, Boston, MA
- **Barbara Cifra, MD**, The Hospital for Sick Children, Toronto, ON, Canada
- **Kristyan Guppy-Coles, BA, BSc (Hons)**, Royal Brisbane and Women’s Hospital, Brisbane, Australia
- **Yuchi Han, MD, MMSc**, University of Pennsylvania, Philadelphia, PA
- **Natalie Jayaram, MD**, Children’s Mercy Hospitals and Clinics, Kansas City, MO
- **Suying Lam, MD**, Jackson Memorial Hospital/University of Miami, Miami, FL
- **Christina Luong, MD**, University of British Columbia, Vancouver, BC, Canada
- **Meena Narayanan, MD**, University of Southern California, Los Angeles, CA
- **Nandini Yadav, MD**, Memorial Sloan Kettering Cancer Center, New York, NY
- **Megan Yamat, RDCS, RCS**, University of Chicago Medical Center, Chicago, IL

ASE Foundation Research Award Recipients

The ASE Research Awards Committee is pleased to announce the recipients of the ASE Foundation’s 2012 Reproducibility Methodology Study Award and 2013 Research Awards. Through its annual research award program, the ASE Foundation supports innovative and meritorious cardiovascular research activities designed to demonstrate echo’s relevance in the changing healthcare environment, and promote new and innovative applications of the technology.

**2012 Reproducibility Methodology Study Award**

- **Anna Lisa Crowley, MD**, Duke Clinical Research Institute, Durham, NC – “Methodology for Improving Reliability and Reproducibility of Echocardiography in Clinical Research (the MIRROR study)”

**2013 Cardiovascular Sonographer Research Award**

- **Victoria S. Moore, RDCS, FASE**, Cincinnati Children’s Hospital, Cincinnati, OH – “Quantitative Non-Invasive Assessment of Right Ventricular Function Using Global Longitudinal Strain and TAPSE in a Pre-Clinical Setting”

**2013 Career Development Award**

- **Thomas A. Miller, DO**, University of Utah, Salt Lake City, UT – “Utilization of a Novel Ultrasound Transducer to Evaluate the Fetal Vascular Response to Uteroplacental Insufficiency in Congenital Heart Disease”
SPECIAL AWARDS

2013 TOMTEC INNOVATOR RESEARCH TRAVEL GRANT
The ASE Foundation is pleased to announce the recipient of the 2013 TomTec Innovator Research Travel Grant. Supported by a grant to the ASE Foundation from TomTec Imaging Systems, this award is given on a yearly basis to support a promising young researcher presenting his/her work at the ASE Scientific Sessions. For more than 20 years, TomTec has driven innovations in echocardiography, and the ASE Foundation thanks them for investing in the young investigators who will continue to drive our field forward. This year’s recipient received $5,000 to support his/her travel expenses.

• Karima Addetia, MD, University of Chicago, Chicago, IL – “Three-Dimensional Assessment of Tricuspid Valve Remodeling in Pulmonary Hypertension”

ULTRAECO, LTD. CARDIOVASCULAR SONOGRAPHER STUDENT TRAVEL GRANT
This award, supported by a grant to the ASE Education and Research Foundation, is presented to a sonographer student enrolled in a CAAHEP accredited cardiac ultrasound program. This grant provides funding to assist a student to attend the annual Scientific Sessions or other ASE-sponsored educational courses. The 2013 student travel grant has been awarded to Juliane DeBorba, Hoffman Heart Institute, Hartford, CT. This award will be recognized during the Council on Cardiac Sonography Business Meeting, Monday, July 1, from 7:00 am – 8:00 am in Lecture Hall 2.

ALAN D. WAGGONER, MHS, RDCS SONOGRAPHER STUDENT SCHOLARSHIPS
The Alan D. Waggoner Sonographer Student Scholarship program was established in 2001 in recognition of Mr. Waggoner’s professional achievements and service to ASE. Funding from the ASE Education and Research Foundation provides a limited number of $1,000 scholarships for students enrolled in a cardiac ultrasound program accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in the United States, or by an equivalent Canadian or international ultrasound program. Also included with each scholarship is a one-year complimentary membership in the ASE, complimentary registration for the recipient to attend the 2013 Scientific Sessions and limited travel support. This year’s recipients were chosen from a large group of well-qualified candidates based on their nominating letters, personal accomplishments, and academic record.

2013 Recipients of the Alan D. Waggoner Scholarship
• Renita Adams, Johns Hopkins School of Cardiac Sonography, Baltimore, MD
• Alyson Cooke, Hoffman Heart and Vascular Institute, Hartford, CT
• Ian Crandall, Hoffman Heart and Vascular Institute, Hartford, CT
• Christine Dauber, Molloy College, Rockville Centre, NY
• Stacy Hedges, Georgia Northwestern Tech, Rome, GA
• Stephanie Kelley, Santa Fe College, Gainesville, FL
• Ashley Robertson, UWHC School of Diagnostic Medical Sonography, Madison, WI
• Rodalyn Soriano, Kettering College, Kettering, OH
• Tehila Wiener, Johns Hopkins School of Cardiac Sonography, Baltimore, MD
• Wendy Yang, Wheaton Franciscan Healthcare-St. Francis Hospital, School of Diagnostic Medical Sonography, Milwaukee, WI

The 2013 student scholarship recipients will be recognized during the ASE Business Meeting/Edler Lecture and Awards Presentation from 3:30 pm – 5:30 pm, Sunday, June 30, in the Main Auditorium.

FEIGENBAUM CARDIOVASCULAR SONOGRAPHER STUDENT TRAVEL GRANT RECIPIENT
This award is supported by a grant to the ASE Education and Research Foundation from Elsevier Inc. to honor Dr. Harvey Feigenbaum’s commitment and tenure as the former JASE Editor for 20 years. It is presented to a sonographer student enrolled in a CAAHEP accredited cardiac ultrasound program. This grant provides funding to assist a student to attend the annual Scientific Sessions or other ASE-sponsored educational courses. The 2013 student travel grant has been awarded to Monica Hanzo, LSU Health, New Orleans, LA. This award will be recognized during the Council on Cardiac Sonography Business Meeting, Monday, July 1, from 7:00 am – 8:00 am in Lecture Hall 2.
2013 COUNCIL TRAVEL GRANT AWARDS
The ASE Foundation sponsors Council Travel Grant Awards to fellows, trainees and sonographers to fund their attendance at the ASE 24th Annual Scientific Sessions. These travel grants are part of an ongoing effort by the Foundation, with the assistance of the Council Boards, to encourage trainees in cardiovascular specialties to focus on the respective echocardiography sub-specialty and to recruit enthusiastic new members to the Council membership.

In addition, the hope of the Council Boards is to provide interested fellows with a deeper understanding of the imaging field and facilitate the development of meaningful mentoring opportunities for trainees with established imaging faculty.

Council on Pediatric and Congenital Heart Disease Travel Grant Award Recipients
• Daniel Forsha, MD
  Duke University Medical Center
  Durham, NC
• Thomas Miller, MD
  University of Utah
  Salt Lake City, UT

Council on Vascular Ultrasound Travel Grant Award Recipients
• Katerina D. Exis, RDCS, RVT
  Walter Reed National Military Medical Center
  Bethesda, MD
• Brooke Harland, MEd, RDCS, RVT
  Baptist Health Lexington
  Lexington, KY
• Anyi Liu, RDMS, RDCS, RVT
  Cleveland Clinic Foundation
  Cleveland, OH

Council on Perioperative Echocardiography Travel Grant Award Recipients
• Sam Hillier, MD
  The Prince Charles Hospital
  Queensland, Australia
• Karen Zimmerman, BS, RCDS (AE, PE), RVT
  Munson Medical Center
  Traverse City, MI

Council on Cardiovascular Sonography Board Travel Grant Awards
• Hollie Carron, RDCS, FASE
  Children’s Medical Center of Dallas
  Dallas, TX
• Yan Wang, RDCS
  Children’s Hospital of Philadelphia
  Philadelphia, PA

These travel grants are provided with the generous support from 2012 Annual Appeal donors.
These daily tracks concentrate on clinical use of cardiovascular ultrasound. Each symposium discusses a specific topic in detail and instructs you on how to apply state-of-the-art cardiovascular ultrasound techniques in clinical practice. NEW for 2013 – innovative multi-specialty symposia bring you a comprehensive view of the issues.

Peri-Operative: This one day symposium, “Multidisciplinary Approach to Complex Intraoperative Decision Making” taking place on Saturday, June 28, has been designed by the ASE Council on Intraoperative Echocardiography to bring surgeons, anesthesiologists, echocardiographers, and sonographers together. The session will feature true multidisciplinary integration with interactive panel discussions, porcine heart dissection, and multimedia presentations including surgical video that comprehensively explore current concepts in mitral valve disease.

Interventional: Interventional echocardiography is a rapidly growing discipline. Learn more about this cutting-edge field.

The Pediatric and Congenital Heart Disease Council has put together a program that promises to be jam-packed with cutting edge science, imaging pearls and hands-on instruction to benefit all members of the pediatric and adult congenital echocardiography community. The popular staples of the program return: Pediatric Echo Jeopardy; the Fireside Chat; case presentations; oral abstract sessions; and the always entertaining controversy debates. We will unveil the mysteries of some of the newer echo technologies and see how expert centers apply them in clinical practice. There will be a full serving of Adult Congenital topics throughout the meeting, with relevant sessions on each day of the meeting.

Investigators will present the latest advances in cardiovascular ultrasound throughout the program. Don’t miss the prestigious Arthur E. Weyman Young Investigator’s Award Competition, where the four best abstracts submitted compete in front of a panel of luminaries for cash prizes and international recognition. Meet the investigators during dedicated poster viewing times, and the Scientific Sessions Wrap-Up will highlight the science you may have missed.

This track will instruct practitioners on techniques of assessment and quantitation. This track is specifically designed for those who want to learn, review or solidify their practical skills.
ASE’s Council on Vascular Ultrasound has put together a rich program that will provide the attendee with an excellent overview on vascular ultrasound topics of interest to the practicing cardiologist/ultrasound technologist. Topics such as carotid imaging will be covered from basics to advanced techniques. Additional state of the art and emerging technologies will be covered as well in what promises to be an exciting session.

Sonographers’ advancement, leadership and contribution to patient care and safety are important to the ASE and discussed in multiple sessions.

The Ticketed Breakfast sessions have already sold out. Please check at the ASE Registration Counter to see if there have been any cancellations.

**TICKETED BREAKFAST SCHEDULE**

**SUNDAY, JUNE 30: 7:00 am - 8:00 am**
- Echo in Patients with VADs
- Prosthetic Valve Dysfunction
- Contrast Echo for Improving Patient Care
- Diastolic Function-How to Incorporate into Clinical Care
- Constrictive, Restrictive, and Effusive-Constrictive Physiologies: How to Distinguish

**MONDAY, JULY 1: 7:00 am - 8:00 am**
- Hemodynamics: Shunt Evaluations and Doppler Quantification
- Case Studies in Advanced LV Mechanics - Twist, Torsion, Strain
- Aortic Stenosis: Pseudo, Low Flow, Low Gradient: How to Tell
- Basic Approach to Assessment of Congenital Heart Disease Echo in the OR

**TUESDAY, JULY 2: 7:00 am - 8:00 am**
- Aortic Trauma: Dissection, Intramural Hematoma, Transection-Differential Diagnosis
- How to Run an Efficient Pediatric Echocardiography Laboratory
- Stress Echo: Experts Bring Their Toughest Cases: Do You Agree With Their Interpretations?
- How to Map the Mitral Valve: 2D and 3D
- Workshop on CRT: Dyssynchrony and AV Optimization: How To Do
7:00 am - 8:00 am  
**New to the Field - How ASE Supports Sonographers**  
Lecture Hall 1  

7:00 am - 7:15 am  
ASE Organization - Membership, Education & Getting Involved  
K. Horton  

7:15 am - 7:25 am  
Fighting for Sonographers - Advocacy S. Maisey  

7:25 am - 7:35 am  
Grassroots - Local Echo Societies C. Williams  

7:35 am - 7:45 am  
Starting a Local Society - Organization, Finances, & Membership M. McCulloch  

7:45 am - 8:00 am  
Local Society Round Table - Question & Answer B. Doldt, M. McCulloch, S. Mozey  

8:00 am - 9:30 am  
**Beyond Lub Dub: The Nitty Gritty of Heart Mechanics**  
Lecture Hall 2  

8:00 am - 8:20 am  
Ventricular Twist Mechanics M. Belohlavek  

8:20 am - 8:40 am  
Assessment of LV Systolic Function in Ischemic Heart Disease P. Sengupta  

8:40 am - 9:00 am  
Assessment of LV Systolic Function in Dyssynchrony J. Uwe Voigt  

9:00 am - 9:20 am  
Assessment of the RV Utility of RV Strain and Twist L. Badano  

9:20 am - 9:30 am  
Question and Answer  

8:00 am - 9:30 am  
**Imaging Essentials: The Exam**  
Lecture Hall 1  

8:00 am - 8:15 am  
Standard TTE Examination/Views S. Stenger  

8:15 am - 8:30 am  
Non-Standard Views P. Knoll  

8:30 am - 8:45 am  
Role of M-Mode and Doppler in Today’s Echo P. Peters  

8:45 am - 9:00 am  
Image Features & Artifacts M. Saric  

9:00 am - 9:15 am  
Imaging the Technically Difficult Patient: Tips and Tricks - The Doppler Exam R. Marshall  

9:15 am - 9:30 am  
Imaging the Technically Difficult Patient: Contrast - When & How T. Belcik  

8:00 am - 9:30 am  
**Functional Mitral Regurgitation**  
Main Auditorium  
Moderator: S. Reeves  

8:00 am - 8:15 am  
Preoperative: Functional MR- How to Evaluate and Should it be Fixed? D. Shook  

8:15 am - 8:30 am  
Intraoperative: Surgical Approach to Functional MR- Repair, Replace J. Walker  

8:30 am - 8:45 am  
Intraoperative: Percutaneous Approach to Functional MR - The Future is Now S. Kar  

8:45 am - 9:00 am  
Postoperative: Predictors of Long-Term Success- Was it Worth Fixing the Valve? K. Harris  

9:00 am - 9:15 am  
Case Presentation: CABG with Moderate Functional MR- What are the Predictors of Success? N. Skubas  

9:15 am - 9:30 am  
Case Presentation: 85 Year Old Patient with Severe Functional MR, EF 30% and COPD G. Restrepo  

8:00 am - 9:30 am  
**Atrial Septal Defects**  
Ballroom A  

8:00 am - 8:20 am  
Pathology S. Sanders  

8:20 am - 8:40 am  
Pre-Operative/Pre-Interventional Echocardiography M. Brook  

8:40 am - 9:00 am  
Peri and Post Interventional Echocardiography T. Slesnick  

9:00 am - 9:20 am  
Surgical ASD Closure in the Interventional Era H. Burkhart  

9:20 am - 9:30 am  
Question and Answer  

8:00 am - 9:30 am  
**Getting Your Fill of Diastology** - Basics  
Ballroom B  

8:00 am - 8:15 am  
What is the Clinical Significance of Diastolic Dysfunction: Epidemiology M. Quiñones  

8:15 am - 8:30 am  
What are the Mechanics of Filling? O. Smiseth  

8:30 am - 8:45 am  
What and How to Measure? What Do the Guidelines Say? H. Dokainish  

8:45 am - 9:00 am  
How to Apply the Guidelines S. Wilansky  

9:00 am - 9:15 am  
Cases of Diastolic Functions: Can the Panel Agree L. Ling  

9:15 am - 9:30 am  
Question and Answer
10:00 am - 11:30 am
Imaging Essentials: Chamber and Function - Lecture Hall 1
Moderator: J. Marshall

10:00 am - 10:15 am
“How To” LVEF (Single Plane, BiPlane, Bullet) D. Agler

10:15 am - 10:30 am
“How To” LV Volumes (2D and 3D) A. Armour

10:30 am - 10:45 am
“How To” LA Volume (2D and 3D) M. Foster

10:45 am - 11:00 am
“When and How:” Evaluating Diastology L. Vidmar

11:00 am - 11:15 am
“When and How:” RV Assessment (RVEF, TDI, TAPSE) L. Hua

11:15 am - 11:30 am
Indexing of Chambers: How Should it Be Done Y. Zhang

10:00 am - 11:30 am
Transcatheter Aortic Valve Replacement: The New Paradigm vs the Last Resort for Aortic Stenosis - Main Auditorium
Moderators: M. Swaminathan, N. Kleiman

10:00 am - 10:15 am
Preoperative: Pre-Procedural Assessment - Multi-Modality Approach Pre-TAVR P. Douglas

10:15 am - 10:30 am
Perspective of the Interventionalist M. Tuzcu

10:30 am - 10:45 am
Intraoperative: Last Resort (Surgeon) H. Schaff

10:45 am - 11:00 am
Case Presentations: Choosing the Appropriate Approach- Transapical, Transaortic F. Mahmood

11:00 am - 11:30 am
Live Taped TAVR D. Rubenson, I. Palacios, C. Stinis

10:00 am - 11:30 am
Functionally Single Ventricles - Ballroom A Moderators: B. Eidem, S. Menon

10:00 am - 10:20 am
Pathology S. Sanders

10:20 am - 10:40 am
The Fontan Operation: Current Surgical Outcomes H. Burkhart

10:40 am - 11:00 am
Echocardiography in the Adult Fontan Patient F. Cetta

11:00 am - 11:20 am
MR and CT in the Adult Fontan Patient A. Powell

11:20 am - 11:30 am
Question and Answer

10:00 am - 11:30 am
Echo in Systemic Disease - Lecture Hall 2
Moderators: M. Scherrer-Crosbie, A. DeMaria

10:00 am - 10:12 am
Oncology and the Heart: What is the Data? J. Plana

10:12 am - 10:24 am
Obesity and the Heart S. Litwin

10:24 am - 10:36 am
Role of MRI in Differential Diagnosis of Cardiomyopathy D. Kwon

10:36 am - 10:43 am
Uncommon Cardiomyopathies: Hypereosinophilic Cardiomyopathy K. Maganti

10:43 am - 10:50 am
Uncommon Cardiomyopathies: Sarcoid K. Yared

10:50 am - 10:57 am
Uncommon Cardiomyopathies: RV Dysplasia D. Sanborn

10:57 am - 11:04 am
Uncommon Cardiomyopathies: Amyloidosis R. Davidoff

11:04 am - 11:11 am
Uncommon Cardiomyopathies: Glycogen Storage Disease M. Coggins

11:11 am - 11:18 am
Uncommon Cardiomyopathies: Noncompaction N. Burkule

11:18 am - 11:30 am
Question and Answer

10:00 am - 11:30 am
Getting Your Fill of Diastology - Advanced - Ballroom B
Moderators: J. Seward, J. Oh

10:00 am - 10:20 am
Pitfalls in Assessment of DD I. Mikati

10:20 am - 10:40 am
Making Sense of Discrepant Indices M. Garcia

10:40 am - 11:00 am
Role of Novel Parameters: Can They Help? (LAV, LA Strain, Diastolic Strain) B. Hoit

11:00 am - 11:15 am
Cases of Diastolic Functions: Can the Panel Agree C. Asher

11:15 am - 11:30 am
Question and Answer

1:00 pm - 2:30 pm
Imaging Essentials: Stress Echocardiography - Lecture Hall 1
Moderators: S. Sawada, S. Nagueh

1:00 pm - 1:15 pm
Overview: Coronary Anatomy, Myocardial Distribution and the Planes of Imaging K. Wei

1:15 pm - 1:30 pm
Pharmacologic Stress in CAD: The Standard Views and Protocol C. Harris

1:30 pm - 1:45 pm
Exercise Stress in CAD: The Standard Views and Protocol S. Mozey

1:45 pm - 2:00 pm
Pharmacologic Stress in Structural Heart Disease: The Standard Views and Protocol R. Saxena

2:00 pm - 2:15 pm
Exercise Stress in Structural Heart Disease: The Standard Views and Protocol R. McCully

2:15 pm - 2:30 pm
3D Stress: Is it in Our Future? M. Takeuchi
1:00 pm - 2:30 pm  
**Hypertrophic Cardiomyopathy** - Main Auditorium  
*Moderators: H. Schaff, K. Glas*

1:00 pm - 1:15 pm  
Preoperative: Diagnostic Features on Echo  
*T. Abraham*

1:15 pm - 1:30 pm  
Intra-Procedural: Intraoperative Assessment  
*S. Shernan*

1:30 pm - 1:45 pm  
Intra-Procedural: The Surgeon’s Perspective  
*H. Schaff*

1:45 pm - 2:00 pm  
Postoperative: Short and Long Term Outcomes  
*M. Brady*

2:00 pm - 2:15 pm  
Case Presentations: Incidental HOCM in Patient Undergoing CAB  
*M. Swaminathan*

2:15 pm - 2:30 pm  
Case Presentations: Mild-Moderate MR Post Myectomy? Back on Bypass for Repair or Leave the Room?  
*S. Shillcutt*

1:00 pm - 2:30 pm  
**Double Outlet Right Ventricle** - Ballroom A  
*Moderators: J. Smallhorn, W. Lai*

1:00 pm - 1:20 pm  
Pathology  
*S. Sanders*

1:20 pm - 1:40 pm  
Current Surgical Management: What is Important for the Surgeon to Know?  
*H. Burkhart*

1:40 pm - 2:00 pm  
Pre-operative Echocardiography  
*L. Lopez*

2:00 pm - 2:20 pm  
Post-operative Echocardiography  
*T. Tacy*

2:20 pm - 2:30 pm  
Question and Answer

1:00 pm - 2:30 pm  
**Echo in Ischemic Heart Disease** - Lecture Hall 2  
*Moderators: A. Neskovic, J. Mohan*

1:00 pm - 1:15 pm  
Echo in the Emergency Department: Non-Invasive Evaluation of Coronary Anatomy  
*J. Lesser*

1:15 pm - 1:30 pm  
Echo in the Emergency Department: Early Stress Testing in the ED  
*S. Mulvagh*

1:30 pm - 1:45 pm  
Echo in the Emergency Department: Future Options - Perfusion Imaging and Molecular Imaging  
*J. Lindner*

1:45 pm - 1:52 pm  
Stat Echo in the ICU: PM Rupture  
*C. Taub*

1:52 pm - 1:59 pm  
Stat Echo in the ICU: Post MI VSD  
*P. Mehrotra*

1:59 pm - 2:06 pm  
Stat Echo in the ICU: An Unusual Dissection  
*T. Zhu*

2:06 pm - 2:13 pm  
Stat Echo in the ICU: Hypotensive Shock  
*M. Wood*

2:13 pm - 2:20 pm  
Stat Echo in the ICU: Hematoma Post Op  
*R. Weiner*

2:20 pm - 2:30 pm  
Stat Echo in the ICU: RV Contusion  
*J. Wu*

1:00 pm - 2:30 pm  
**Point of Care** - Ballroom B  
*Moderators: K. Spencer, M. Picard*

1:00 pm - 1:15 pm  
Role of Focused Echo: ASE Guidelines  
*A. Labowitz*

1:15 pm - 1:30 pm  
Hand Held Ultrasound: Device Types, Ultrasound Physics  
*K. Spencer*

1:30 pm - 1:45 pm  
Hand Held Ultrasound: How to Set Up, Training, QA, Documentation  
*V. Noble*

1:45 pm - 2:00 pm  
Cases: Use in ED and ICU- Indications, Protocols, Documentation  
*V. Noble*

2:00 pm - 2:15 pm  
Can Hand Held Ultrasound Improve the Efficiency of Community and Hospital Based Echo Services?  
*M. Monaghan*

2:15 pm - 2:30 pm  
Cases: Non Cardiac Use- Pulmonary Edema, Aorta, Line Placement  
*C. Moore*

3:00 pm - 4:30 pm  
**Imaging Essentials: Can We Agree on the Numbers?** - Lecture Hall 1  
*Moderators: B. Doldt, P. Pellikka*

3:00 pm - 3:30 pm  
What’s the EF?  
*D. Agler*

3:30 pm - 4:00 pm  
Is There Diastolic Dysfunction?  
*K. Chin*

4:00 pm - 4:30 pm  
Positive or Negative Stress? What Did the Cath Show?  
*S. Mulvagh*

3:00 pm - 4:30 pm  
**Elective Aortic Valve Replacement with Dilated Aortic Root: Should the Root be Replaced** - Main Auditorium  
*Moderators: E. Isselbacher, H. Schaff*

3:00 pm - 3:15 pm  
Aortic Valve and Root Anatomy: How to Evaluate and Do the Guidelines Guide Us?  
*R. Sniecinski*

3:15 pm - 3:30 pm  
Intraoperative: What Does the Surgeon Need to Know and Surgical Options  
*T. Sundt*

3:30 pm - 3:45 pm  
Postoperative: Is There Outcome Data? Who Will Be Back?  
*A. Finley*

3:45 pm - 4:30 pm  
Case Presentations: The Marfan’s Patient with a Dilated Aortic Root, Bicuspid Valve and Mild AI  
*K. Zimmerman, E. Isselbacher, K. Glas*
3:00 pm - 4:30 pm
Getting to the Heart of the Matter: Practical Points on Quantitative Echo - Lecture Hall 2
Moderators: S. Park, S. Lerakis

3:00 pm - 3:15 pm
Accurate Chamber Measurements: Devil’s in the Details
M. Bierig

3:15 pm - 3:30 pm
MR Quantitation: Jet Area, VC, PISA: When and How to Do? S. Little

3:30 pm - 3:45 pm
AR Quantitation: How to Really Assess J. Dent

3:45 pm - 4:00 pm
Doppler Hemodynamics: Which Fuzzy Line to Pick? S. Wiegers

4:00 pm - 4:15 pm
3D Quantitation: When to Use? L. Sugeng

4:15 pm - 4:30 pm
Destressing About Strain T. Kollaras

SPECIAL EVENT 3:00 PM - 4:30 PM

Live Scanning Session - Ballroom B
Moderator: C. Moore

3:00 pm - 3:30 pm
Abdomen/Aorta C. Moore

3:30 pm - 4:00 pm
Line Placement/Lungs V. Noble

4:00 pm - 4:30 pm
LV/RV Function D. Rubenson, D. Adams

3:00 pm - 3:30 pm
Council Meeting Pediatric and Congenital Heart Disease and Awards Presentation - Ballroom A

3:30 pm - 4:30 pm
Pediatric Echo Jeopardy - Ballroom A
Chair: M. Brook

Team Canada M. Friedberg, A. Dragulescu
Team USA East M. Quartermain, M. Cohen, J. Lu
Team USA West B. Soriano, T. Tacy, M. Puchalski
Team USA Midwest & South C. Spencer, W. Border, V. Guerra
Team Europe D. Coleman, J. Simpson

4:30 pm - 4:45 pm
Council on Perioperative Echocardiography Business Meeting and Award Presentations - Main Auditorium
Moderator: S. Reeves
7:00 am - 8:00 am
Constrictive, Restrictive, and Effusive-Constrictive Physiologies: How to Distinguish - 200 E (Ticket Required for Admission)
Moderator: S. Kort

7:00 am - 7:10 am
Overview D. Verhaert

7:10 am - 7:25 am
Case of Effuso-Constrictive K. Yared
7:25 am - 7:40 am
Case of Constriction L. Fernandez-Friera
7:40 am - 7:55 am
Case of Restriction S. Kort
7:55 am - 8:00 am
Question and Answer

7:00 am - 8:00 am
Contrast Echo for Improving Patient Care - 200 C (Ticket Required for Admission)
Moderator: K. Wei

7:00 am - 7:15 am
Optimization of Contrast Echo-Case Based Approach S. Mulvagh
7:15 am - 7:30 am
Case Illustrations: Contrast for Wall Motion at Rest and Stress K. Wei
7:30 am - 7:45 am
Case Illustrations: Contrast for Thrombi and Masses H. Leong-Poi
7:45 am - 8:00 am
Question and Answer

7:00 am - 8:00 am
Diastolic Function-How to Incorporate into Clinical Care - 200 D (Ticket Required for Admission)
Moderator: S. Lester

7:00 am - 7:30 am
Case Studies in Heart Failure with Preserved LV Function R. Palma, J. Ha
7:30 am - 7:45 am
The Diastolic Stress Test B. Hoit
7:45 am - 8:00 am
Question and Answer

7:00 am - 8:00 am
Echo in Patients with VADs - 200 A (Ticket Required for Admission)
Moderator: M. Picard

7:00 am - 7:10 am
Intro to Mechanical Circulatory Support M. Picard
7:10 am - 7:20 am
Case 1 Device Optimization K. Hryniewicz
7:20 am - 7:25 am
Question and Answer
7:25 am - 7:35 am
Case Illustration: When Things Go Wrong Y. Topilsky
7:35 am - 7:40 am
Question and Answer

7:40 am - 7:50 am
Case Illustration: Importance of RV Function J. Kirkpatrick
7:50 am - 8:00 am
Question and Answer

7:00 am - 8:00 am
Prosthetic Valve Dysfunction - 200 B (Ticket Required for Admission)
Moderator: J. Dumesnil

7:00 am - 7:15 am
Prosthetic Valve Pannus or Mismatch? J. Dumesnil
7:15 am - 7:30 am
Prosthetic Regurgitation-Obvious and Occult L. Blauwet
7:30 am - 7:45 am
Miscellaneous Prosthetic Problems-Complications of Surgery, Infection J. Dent
7:45 am - 8:00 am
Question and Answer

8:00 am - 9:30 am
Imaging Essentials: The Mitral Valve - Lecture Hall 1
Moderators: J. Dent, C. Mitchell

8:00 am - 8:20 am
Mitral Stenosis: Epidemiology and Imaging Features R. Davidoff
8:20 am - 8:50 am
How to Assess Mitral Stenosis: Pearls and Pitfalls J. Neary
8:50 am - 9:10 am
Mitral Regurgitation Mechanisms and Imaging Features K. Koulogiannis
9:10 am - 9:20 am
How to Assess Mitral Regurgitation: Pearls and Pitfalls B. Roberts
9:20 am - 9:30 am
Question and Answer

8:00 am - 9:30 am
Emerging Technologies in Pediatric Imaging (Joint ASE/EACVI Session) - Ballroom A
Moderators: O. Miller, B. Eidem

8:00 am - 8:20 am
Imaging Myocardial Mechanics by 3-D Strain Imaging-Ready for Clinical Use? B. Heyde
8:20 am - 8:40 am
Vortex Flow Imaging in Pediatric Heart Disease L. Lovstakken
8:40 am - 9:00 am
High-Resolution Vascular Ultrasound: Potential New Clinical Application T. Sarkola
9:00 am - 9:20 am
High-Frequency 3-D Echocardiography D. Perrin
9:20 am - 9:30 am
Question and Answer

8:00 am - 9:30 am
Aortic Stenosis - Main Auditorium
Moderators: C. Otto, M. Picard

8:00 am - 8:15 am
Biology of AS and Disease Progression C. Otto
8:15 am - 8:30 am
Aortic Stenosis: A Genetic Disease? What is the Data? M. Keane

8:30 am - 8:45 am
Demographics and Trends of AS T. Le Tourneau

8:45 am - 9:00 am
Assessing AS Severity: Definitions and Guidelines J. Tam

9:00 am - 9:15 am
Asymptomatic Severe Aortic Stenosis: Timing of Intervention B. Carabello

9:15 am - 9:30 am
Surgical AVR: Treatment Options in the Era of TAVR T. Sundt

8:00 am - 9:30 am
Stress Echocardiography: Read With the Experts (Joint ASE/EACVI Session) - Lecture Hall 2
Moderators: P. Pellikka, S. Iliceto

8:00 am - 8:15 am
DSE: Overview J. Uwe Voigt

8:15 am - 8:25 am
Cases: LBBB J. Uwe Voigt

8:25 am - 8:40 am
Exercise Stress for CAD K. Kurrelmeyer

8:40 am - 8:55 am
Exercise Stress Echo: Valve Disease P. Lancellotti

8:55 am - 9:10 am
Stress Echo in Diastolic Function C. Shub

9:10 am - 9:20 am
Cases: CAD J. Puthumana

9:20 am - 9:30 am
Cases: IMR J. Magne

8:00 am - 9:30 am
The Right Heart: How Best to Assess? - Ballroom B
Moderator: T. Shiota

8:00 am - 8:15 am
The Right Heart: Does It Matter? L. Gillam

8:15 am - 8:30 am
Guidelines on How to Assess the Right Atrium and Ventricle L. Rudski

8:30 am - 8:45 am
TV and PV: How to Access by Echo S. Mankad

8:45 am - 9:00 am
Right Ventricular Function: Novel Methods A. Shad

9:00 am - 9:15 am
Prognosis of Unrepaired Tricuspid Regurgitation and When Should We Fix? N. Pandian

9:15 am - 9:30 am
Pulmonary Hypertension: How to Assess P. Gutierrez Fajardo

10:15 am - 11:45 am
Imaging Essentials: Prosthetic Valve Function - Lecture Hall 1
Moderators: W. Zoghbi, P. Knoll

10:15 am - 10:30 am
Echocardiographic Features by Valve Type F. Flachskampf

10:30 am - 10:45 am
“How To”-Mitral Valve Prosthesis Dysfunction (Case based) K. Kassimatis

10:45 am - 11:00 am
Prosthetic Mitral Valve Dysfunction P. Grayburn

11:00 am - 11:15 am
“How To”-Aortic Valve Prosthesis (Case based) B. Kane

11:15 am - 11:30 am
Prosthetic Aortic Valve Dysfunction M. Quiñones

11:30 am - 11:45 am
Question and Answer

10:15 am - 11:45 am
Transporting Newer Echocardiography Technology From Bench to Bedside - Ballroom A
Moderators: M. Cohen, B. Soriano

10:15 am - 10:40 am
How to Use Strain Imaging for Assessing Ventricular Function in Daily Practice: A Case-Based Presentation A. Dragulescu

10:40 am - 11:05 am
How to Use 3-D Imaging to Assess AV-Valve Reguritation in the Operating Room J. Simpson

11:05 am - 11:30 am
How to Practically Assess Mechanical Dyssynchrony in the Pediatric Population: A Case-Based Presentation M. Friedberg

11:30 am - 11:45 am
Question and Answer

10:15 am - 11:45 am
Adult Congenital Symposia - Ballroom B
Moderator: S. Siu

10:15 am - 10:30 am
Demographics of Adult Congenital Heart Disease: Who Will Take Care? J. Moller

10:30 am - 10:45 am

10:45 am - 11:00 am
Late Issues-Post Fontan: What to Look For? C. Silversides

11:00 am - 11:15 am
Tetralogy of Fallot-Post-Repair Sequellae M. King

11:15 am - 11:30 am
Transposition of the Great Arteries S/P Switch: What are the Late Sequellae? K. Stout

11:30 am - 11:45 am
Pregnancy in ACHD: Special Issues N. Ammash

10:15 am - 11:45 am
Echo in Afib - Lecture Hall 2
Moderators: N. Pandian, B. Hoit

10:15 am - 10:30 am
Role of Imaging in Afib R. Asinger

10:30 am - 10:55 am
Role of TEE in Cardioversion M. Stoddard

10:55 am - 11:15 am
New Anticoagulation Treatment Options for Afib W. Wysokinski
11:15 am - 11:35 am
Role of LAA Occluder Devices I. Kronzon

11:35 am - 11:45 am
Question and Answer

10:15 am - 11:45 am
Interventional Echocardiography 1: Transcatheter Aortic Valves - Main Auditorium
Moderators: W. Stewart, N. Weissman

10:15 am - 10:30 am
Transcatheter Aortic Valve Replacement: Overview of Current Clinical Indications J. Passeri

10:30 am - 10:45 am
The Role of Echocardiography in Patient Selection G. Aurigemma

10:45 am - 11:00 am
Complications of TAVR: How Can Echo Help? S. Goldstein

11:00 am - 11:15 am
The Future of TAVR: Who Will Be Eligible and New Devices W. Stewart

11:15 am - 11:25 am
Core Valve - Pre and Post Evaluation by TTE H. Diglio

11:25 am - 11:35 am
Core Valve - Unique Imaging Features L. Gillam

11:35 am - 11:45 am
Case Presentation Core: Imaging from Start to Finish K. Koulogiannis

1:15 pm - 2:45 pm
Imaging Essentials: The Aortic Valve - Lecture Hall 1
Moderators: J. Aragam, M. Orsinelli

1:15 pm - 1:30 pm
Aortic Stenosis B. Schwaegler

1:30 pm - 1:45 pm
Other Measures of Aortic Severity and Pressure Recovery P. Pibarot

1:45 pm - 2:00 pm
Aortic Regurgitation P. Burgess

2:00 pm - 2:15 pm
HOCM and Dynamic Outflow Gradients E. McIlwan

2:15 pm - 2:30 pm
Imaging the Aorta: Where and When J. Rizzo

2:30 pm - 2:45 pm
Multimodality of Aorta and Valve: 3D, CT, MRI M. Garcia

1:15 pm - 2:45 pm
My Most Instructive Cases - Hypoplastic Left Heart Syndrome From Stage 1 to Stage 3 - Ballroom A

1:15 pm - 1:30 pm
Philadelphia Group M. Cohen, S. Natarajan

1:30 pm - 1:45 pm
Boston Group T. Geva, K. Friedman

1:45 pm - 2:00 pm
Columbus Group J. Kovalchin, K. Texter

2:00 pm - 2:15 pm
Wisconsin Group P. Frommelt, G. Hill

2:15 pm - 2:30 pm
Edmonton Group J. Smallhorn, N. Khoo

2:30 pm - 2:45 pm
Toronto Group M. Friedberg, S. Senthilnathan

1:15 pm - 2:45 pm
Echocardiographic Imaging for Structural Heart Disease Intervention - Main Auditorium
Moderators: S. Goldstein, M. Saric

1:15 pm - 1:25 pm
The ASE/EACVI Guidelines C. Bruce

1:25 pm - 1:35 pm
Evolving Role of Echo in Interventions for Structural Heart Disease I. Kronzon

1:35 pm - 1:50 pm
Mechanism of Mitral Regurgitation and Patient Selection for Percutaneous Mitral Valve Devices N. Weissman

1:50 pm - 2:05 pm
Transcatheter Mitral Valve Repair: Who is Eligible P. Grayburn

2:05 pm - 2:20 pm
LAA Closure Devices: How Can Echo Help? M. Saric

2:20 pm - 2:35 pm
ASD and VSD Closure I. Palacios

2:35 pm - 2:45 pm
Question and Answer

1:15 pm - 2:45 pm
Pericardial Disease - Ballroom B
Moderators: J. Kisslo, J. Mangion

1:15 pm - 1:30 pm

1:30 pm - 1:45 pm
Tamponade Physiology: Tamponade Cases- Good, Ugly, and Bad C. Asher

1:45 pm - 2:00 pm
Effuso-Constriction, Constriction vs. Restriction-Physiology J. Oh

2:00 pm - 2:15 pm
Role of Multimodality Imaging in Pericardial Disease: When to Use What? R. Kerber

2:15 pm - 2:30 pm

2:30 pm - 2:45 pm
Question and Answer

1:15 pm - 2:45 pm
Which Imaging Modality to Use When? Integrating Echo, MRI and CT in Practice - Lecture Hall 2
Moderators: J. Shirani, S. Lerakis

1:15 pm - 1:30 pm
Cardiomyopathy J. Shirani

1:30 pm - 1:45 pm
Myocardial Viability W. Zoghbi
SUNDAY, JUNE 30
SCHEDULE

1:45 pm - 2:00 pm
The Right Ventricle D. Prior
2:00 pm - 2:15 pm
The Pericardium M. Desai
2:15 pm - 2:30 pm
Cardiac Mass P. Patil
2:30 pm - 2:45 pm
Question and Answer

SPECIAL EVENT 3:30 PM - 5:30 PM

ASE 24th Annual Edler Lecture and Awards Presentation/
ASE Annual Business Meeting -
Main Auditorium

3:30 pm - 3:35 pm
Welcome and Scientific Sessions Highlights J. Hung

3:35 pm - 3:36 pm
ASE Annual Membership Meeting Call to Order P. Pellikka

3:36 pm - 3:38 pm
Review of June 2012 Minutes M. McCulloch

3:38 pm - 3:43 pm
Treasurer’s Report S. Nagueh

3:43 pm - 3:50 pm
Executive Committee and Board of Directors
Announcements P. Pellikka

3:50 pm - 4:00 pm
State of the ASE Presentation P. Pellikka

4:00 pm - 4:15 pm
Incoming President’s Address B. Byrd

4:15 pm - 5:00 pm
ASE 2013 Awards P. Pellikka

5:00 pm - 5:01 pm
Introduction of the 2013 Edler Lecture P. Pellikka

5:01 pm - 5:25 pm
Edler Lecture: The Miracle of Echocardiography: From
Physics to Physiology to Population Health J. Thomas

5:25 pm - 5:30 pm
Closing Announcements P. Pellikka

DON’T FORGET THE OUTDOOR WELCOME RECEPTION!

From 5:30 pm - 6:30 pm on the Outdoor Lawn, please come and enjoy a lovely summer evening at a complimentary outdoor welcome reception only steps from your sessions. Enjoy the gorgeous Minneapolis weather while conversing with colleagues and friends.
MONDAY, JULY 1
SCHEDULE

7:00 am - 8:00 am
Council on Cardiovascular Sonography Business Meeting & Awards Presentation - Lecture Hall 2
Moderator: K. Horton

7:00 am - 7:15 am
An Update from the Council Chair K. Horton

7:15 am - 7:30 am
Presentation of Awards and Grants E. McIlwain

7:30 am - 7:45 am
Advanced Cardiovascular Sonography - Update M. Bierig

7:45 am - 8:00 am
Sonographer Research Grant Presentation C. Luoma

7:00 am - 8:00 am
Aortic Stenosis: Pseudo, Low Flow, Low Gradient - How to Tell - 200 C (Ticket Required for Admission)
Moderator: C. Otto

7:00 am - 7:15 am
Case: Low Flow-Low Gradient H. Watanabe

7:15 am - 7:30 am
Case: Pseudo AS R. Ronderos

7:30 am - 7:45 am
Case: Low Flow- Low Gradient vs. Normal Flow V. Nkomo

7:45 am - 8:00 am
Question and Answer

7:00 am - 8:00 am
Basic Approach to Assessment of Congenital Heart Disease - 200 D (Ticket Required for Admission)
Moderator: M. King

7:00 am - 7:15 am
Case J. Berry

7:15 am - 7:30 am
Case E. Krieger

7:30 am - 7:45 am
Case M. King

7:45 am - 8:00 am
Question and Answer

7:00 am - 8:00 am

7:00 am - 7:15 am
Case of Twist/Torsion-How to Measure Clinical Application? R. Weiner

7:15 am - 7:30 am
How Can Strain Help? M. Scherrer-Crosbie

7:30 am - 7:45 am
Overview of LV Twist/Torsion-Definitions J. Lowenstein

7:45 am - 8:00 am
Question and Answer

7:00 am - 8:00 am
Echo in the OR - 200 E (Ticket Required for Admission)
Moderator: M. Andrawes

7:00 am - 7:10 am
Case S. Pislaru

7:10 am - 7:25 am
Case M. Andrawes

7:25 am - 7:40 am
Pre Bypass Images: Where Do I Start? M. Adams

7:40 am - 7:55 am
Post Bypass Images: What to Look For A. Fox

7:55 am - 8:00 am
Question and Answer

7:00 am - 8:00 am
Hemodynamics: Shunt Evaluations and Doppler Quantification - 200 A (Ticket Required for Admission)
Moderator: J. Kisslo

7:00 am - 7:15 am
How Much MR? S. Iwanaga

7:15 am - 7:30 am
Case: VSD Small or Large? How to Tell J. Kisslo

7:30 am - 7:45 am
Case of RVSP Determination in Setting of VSD K. Poh

7:45 am - 8:00 am
Question and Answer

7:45 am - 8:00 am
Council on Vascular Ultrasound Business Meeting - Lecture Hall 1

8:00 am - 9:30 am
Imaging Essentials: Vascular Exam - Lecture Hall 1
Moderators: S. Perese, V. Nambi

8:00 am - 8:15 am
Performing the Standard Carotid Examination A. Liu

8:15 am - 8:30 am
Overcoming Imaging Challenges M. Park

8:30 am - 8:45 am
Duplex Evaluation of Carotid Stenosis: Determining Location and Severity N. Evans

8:45 am - 9:00 am
Beyond Atherosclerotic Disease E. Kim

9:00 am - 9:15 am
The High Quality Carotid Study: Quality Assurance in the Vascular Lab S. Perese

9:15 am - 9:30 am
Question and Answer
### MONDAY, JULY 1

#### SCHEDULE

**8:00 am - 9:30 am**

**Diastolic Function Assessment from Basics to Applications** - Ballroom A  
*Moderators: J. Oh, P. Frommelt*

8:00 am - 8:20 am  
What are the Mechanics of Filling? *J. Thomas*

8:20 am - 8:40 am  
Echocardiographic Assessment of Filling- How to Use the Guidelines? *S. Nagueh*

8:40 am - 9:00 am  
Limitations of the Guidelines When Applied to Pediatric and Congenital Heart Disease *L. Mertens*

9:00 am - 9:30 am  
Panel Discussion

**8:00 am - 9:30 am**

**3D Echocardiography and Contrast** - Lecture Hall 2  
*Moderators: M. Vannan, L. Badano*

8:00 am - 8:15 am  
3D Echo: What are Current Clinical Applications? *R. Lang*

8:15 am - 8:30 am  
3D Echo: Basics of Acquisition and Protocols *L. Sugeng*

8:30 am - 8:45 am  
What is Next in 3D Echo? *V. Mor-Avi*

8:45 am - 9:00 am  
How to Apply Contrast in Echo Lab *M. Main*

9:00 am - 9:10 am  
Case: Contrast *M. Vannan*

9:10 am - 9:20 am  
Case: 3D Echo *W. Tsang*

9:20 am - 9:30 am  
Question and Answer

**8:00 am - 9:30 am**

**Takatsubo’s Cardiomyopathy: History, Present and Future**  
*(ASE/JSE Joint Session)* - Ballroom B  
*Moderators: K. Takenaka, J. Tajik*

8:00 am - 8:15 am  
Takotsubo’s Cardiomyopathy: How did it Get its Name and Who Gets it? History and Demographics *C. Izumi*

8:15 am - 8:30 am  
Clinical Manifestations and Course *B. Khandheria*

8:30 am - 8:45 am  
What is Mechanism? Pathophysiology and Imaging Features (Typical and Atypical) *S. Sharkey*

8:45 am - 9:00 am  
Diagnosis and Treatment 2013 and Beyond *H. Okura*

9:00 am - 9:20 am  
Cases: Typical, Atypical *H. Dokainish, D. Defaria-Yeh, R. Martin*

9:20 am - 9:30 am  
Question and Answer

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**8:00 am - 9:30 am**

**Mitrval Regurgitation** - Main Auditorium  
*Moderators: A. Prado, M. Sarano*

8:00 am - 8:15 am  
Organic Mitrval Regurgitation *H. Michelena*

8:15 am - 8:30 am  
IMR: How to Identify *R. Levine*

8:30 am - 8:45 am  
3D Echo in MV Disease *J. Kwan*

8:45 am - 9:00 am  
Mitrval Regurgitation: Therapy in 2013- How Can Imaging Guide Treatment *M. Sarano*

9:00 am - 9:30 am  
Cases with Panel Discussion *J. Dal-Bianco, Y. Otsuji*

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**SPECIAL EVENT 10:15 AM - 11:45 AM**

2013 Arthur E. Weyman Young Investigator’s Award Competition / 14th Annual Feigenbaum Lecture - Main Auditorium  
*Moderators: J. Lindner, R. Hahn*  
*Judges: J. Lindner, R. Hahn, K. Yoshida, P. Lancellotti, A. Weyman, P. Pellikka, J. DeCara, S. Kaul*

10:15 am - 10:20 am  
Welcome and Introduction of Judges *J. Lindner*

10:20 am - 10:35 am  
YIA-1: Impact of Vagal Nerve Stimulation on Left Atrial Structure and Function in a Canine Model of Tachycardia-induced Dilated Cardiomyopathy *K. Kusunose*

10:35 am - 10:50 am  
YIA-2: Differences in Lean Body Mass May Explain the Racial Disparities Seen in Carotid Intima-Media Thickness in Obese Children *S. Chowdhury*

10:50 am - 11:05 am  
YIA-3: An Educational Intervention Reduces the Rate of Inappropriate Transthoracic Echocardiograms in Ambulatory Care *S. Bhatia*

11:05 am - 11:20 am  
YIA-4: Diverse Mechanisms are Responsible for Low Gradient in Severe Aortic Stenosis Beyond Low Ejection Fraction and High Vascular Load *A. Ramamurthi*

11:20 am - 11:40 am  
14th Annual Feigenbaum Lecture – Intelligent Platforms for Disease Assessment: Novel Approaches in Functional Echocardiography *P. Sengupta*

11:40 am - 11:43 am  
Recognition of Feigenbaum Lecturer and Presentation of Plaque *H. Feigenbaum, P. Sengupta*

11:43 am - 11:45 am  
Presentation of YIA Plaques and Announcement of Winner *J. Lindner, R. Hahn*
**Monday, July 1**

**Schedule**

**1:15 pm - 2:45 pm**

**The Use of Imaging in the Failing Fontan Circulation**
- Ballroom A  
  *Moderators: J. Rychik, P. Barker*

**1:15 pm - 1:35 pm**

Why Does the Fontan Circulation Fail? D. Goldberg

**1:35 pm - 1:55 pm**

Assessing the Pulmonary Circulation in Fontan Patients: Systemic Venous and Pulmonary Venous Flow F. Cetta

**1:55 pm - 2:15 pm**

Protein-Losing Enteropathy and the Enteric Circulation: Looking Beyond the Heart J. Rychik

**2:15 pm - 2:35 pm**

Systolic and Diastolic Functional Assessment of the Single Ventricle P. Frommelt

**2:35 pm - 2:45 pm**

Question and Answer

**1:15 pm - 2:45 pm**

**Hypertrophic Cardiomyopathy: State of the Art in Imaging and Decision Making**
- Main Auditorium  
  *Moderators: B. Maron, R. Levine*

**1:15 pm - 1:30 pm**

Genetics C. Ho

**1:30 pm - 1:45 pm**

Pathophysiology: Clinical Phenotypes M. Sherrid

**1:45 pm - 2:00 pm**

Echo Manifestations of Hypertrophic Cardiomyopathy S. Nagueh

**2:00 pm - 2:15 pm**

Predictors of Poor Prognosis A. Baggish

**2:15 pm - 2:30 pm**

Risk Stratification by MultiModality Imaging M. Maron

**2:30 pm - 2:45 pm**

What Do the Guidelines Say? Treatment in 2013 B. Maron

**1:15 pm - 2:45 pm**

**Live Scanning**
- Ballroom B

**1:15 pm - 1:45 pm**

Aortic Stenosis: Avoiding the Pitfalls- Can 3D Help? J. Kisslo, M. Umland

**1:14 pm - 2: 15 pm**

Scanning for MR H. Michelena, G. Strachan

**2:15 pm - 2:45pm**

HOCM: How to Get LVOT Gradient While Avoiding the MR? How Can you Tell? J. Kisslo, S. Tucker

**1:15 pm - 2:45 pm**

**Tissue Imaging: State of the Art and Clinical Application**
- Lecture Hall 2  
  *Moderators: T. Abraham, J. Lowenstein*

**1:15 pm - 1:35 pm**

Basics of Strain Imaging: Tissue Velocity vs. Speckle-Tracking T. Edvardsen

**1:35 pm - 1:55 pm**

Strain: What Can it Add? M. Scherrer-Crosbie

**1:55 pm - 2:15 pm**

Vendor Independence J. Thomas

**2:15 pm - 2:35 pm**

Cases or Abstract (Value Add for Strain, Amyloid, MR Data) M. Murata

**2:35 pm - 2:45 pm**

Value Add for Strain Imaging?-Case based O. Smiseth

**1:15 pm - 2:45 pm**

**Integrating Carotid Duplex in Patient Management**
- Lecture Hall 1  
  *Moderators: R. Eberhardt, V. Nambi*

**1:15 pm - 1:27 pm**

My Patient Has an LDL of 120 and Intermediate Framingham Risk Score R. Kasliwal

**1:27 pm - 1:39 pm**

My Patient Went to Life Line Screening and has a 60% Carotid Stenosis A. Johri

**1:39 pm - 1:51 pm**

My Patient Had Arm Weakness Two Days Ago R. Benenstein

**1:51 pm - 2:03 pm**

My Patient Has Dizziness and Arm Pain V. Chadachan

**2:03 pm - 2:15 pm**

My Patient Just Had a Carotid Stent R. Eberhardt

**2:15 pm - 2:27 pm**

My Patient in the CCU Just Had a Carotid Study N. Hamburg

**2:27 pm - 4:05 pm**

**Question and Answer**

**3:30 pm - 5:00 pm**

**Fetal Hyperoxia-Physiology and Potential Implications for Fetal Treatment**
- Ballroom A  
  *Moderators: A. Moon-Grady, J. Rychik*

**3:30 pm - 3:50 pm**

Physiology of Maternal Oxygen Administration J. Huhta

**3:50 pm - 4:10 pm**

Fetal Flow Measurements in Response to Oxygen Administration. MRI Flow Measurements M. Seed

**4:10 pm - 4:30 pm**

Maternal Hyperoxia- How to Assess Response to Oxygen Administration by Echocardiography A. Szwast

**4:30 pm - 4:50 pm**

Diagnostic and Therapeutic Use of Maternal Hyperoxygenation in HLHS

**4:50 pm - 5:00 pm**

Question and Answer

**3:30 pm - 5:00 pm**

**Clinical Cases Competition**
- Lecture Hall 1  
  *Moderators: J. Thomas, M. Xie*  
  *Judges: K. Sagar, I. Kronzon, N. Schiller, A. Pearlman*

**3:30 pm - 3:39 pm**

CC-01: Transient and Reversible Acute Severe Mitral Regurgitation with Sudden Apical Tenting of Mitral Leaflets J. Son

**3:39 pm - 3:48 pm**

CC-02: A Curious Case of Endomyocardial Fibrosis D. Roper

**3:48 pm - 3:57 pm**

CC-03: Impalement of Tricuspid Valve Leaflet on Pacemaker Lead M. Yamat
3:57 pm - 4:06 pm
CC-04: Transcatheter Repair of Acute Post-Myocardial Infarction Left Ventricular Pseudoaneurysm R. Kumar

4:06 pm - 4:15 pm
CC-05: A Case of Anomalous Origin of the Left Coronary Artery Arising from the Right Pulmonary Artery in an Infant with a Large VSD J. Kreeger

4:15 pm - 4:24 pm
CC-06: Doppler Echocardiographic Quantification of Aortic Regurgitation in a Patient with Left Ventricular Assist Device Inefficiency and Refractory Symptoms O. Khalique

4:24 pm - 4:33 pm
CC-07: Diagnostic Role of Echocardiography in Atrio-Esophageal Fistula B. Sedberry

4:33 pm - 4:42 pm
CC-08: Percutaneous Paravalvular Leak Closure and Implantation of a Melody Valve-in-Valve R. Kumar

4:42 pm - 4:51 pm
CC-09: Prosthetic Mitral Valve Obstruction: Accurate Diagnosis by 3D-Transesophageal Echocardiography R. Janardhanan

4:51 pm - 5:00 pm
CC-10: Right Atrial Mass in Eosinophilic Myocarditis D. Burstow

3:30 pm - 5:00 pm
Echo in Heart Failure: Mechanical Support - Ballroom B

Moderators: R. Stainback, N. Nanda

3:30 pm - 3:50 pm
VADs Types J. Walker

3:50 pm - 4:10 pm
Indications for Insertion and Role of Echo in Management J. Estep

4:10 pm - 4:30 pm
Echo Features of LVADs / Impellas: How and What to Assess J. Kirkpatrick

4:30 pm - 4:50 pm
Complications: What to Look For J. Estep

4:50 pm - 5:00 pm
Question and Answer

3:30 pm - 5:00 pm
Echo of the Future: Technologic Developments that May Change Practice - Lecture Hall 2

Moderators: V. Mor-Avi, P. Lancellotti

3:30 pm - 3:45 pm
Beyond 3D/4D – New Hardware & Software Developments M. Monaghan

3:45 pm - 4:00 pm
Advanced Hemodynamics with Echo B. Khandheria

4:00 pm - 4:15 pm
Molecular Imaging with Echocardiography F. Villanueva

4:15 pm - 4:30 pm
Cardiovascular Ultrasound Therapy T. Porter

4:30 pm - 4:45 pm
Emerging Technologies in Vascular Ultrasound V. Nambi

4:45 pm - 5:00 pm
Flow Vortex Imaging M. Belohlavek

5:00 pm - 6:00 pm
PC Fireside Chat: Jeffrey Smallhorn - Ballroom A

Moderators: J. Smallhorn, L. Mertens

SPECIAL EVENT 5:00 PM - 6:30 PM

Echo Jeopardy - Main Auditorium

Host: J. Gorcsan

Emcee: R. Martin

Team 1: M. Quiñones, L. Gillam

Team 2: B. Armstrong, B. Anderson

Team 3: P. Zamorano, J. Nesser

Judges: S. Mankad, D. Adams, N. Pandian
7:00 am - 8:00 am  
Aortic Trauma: Dissection, Intramural Hematoma, Transection-Differential Diagnosis  - 200 A  
(Ticket Required for Admission)  
Moderator: L. Rodriguez

7:00 am - 7:15 am  
Overview L. Rodriguez
7:15 am - 7:30 am  
Case 1: Intramural Hematoma L. Rodriguez  
Case 2 H. Michelsen  
7:30 am - 7:45 am  
Case 2: Can 3D Help? E. Gill  
7:45 am - 8:00 am  
Case 3: Can 3D help? V. Rigolin

7:00 am - 8:00 am  
How to Map the Mitral Valve: 2D and 3D  - 200 D  
(Ticket Required for Admission)  
Moderator: V. Rigolin

7:00 am - 7:15 am  
Overview F. Delling  
7:15 am - 7:30 am  
Case 1: D. McCarty  
7:30 am - 8:00 am  
Case 2: Can 3D Help? E. Gill  
7:45 am - 8:00 am  
Case 3: Can 3D help? V. Rigolin

7:00 am - 8:00 am  
How to Run an Efficient Pediatric Echocardiography Laboratory  - 200 B (Ticket Required for Admission)  
Moderators: L. Lopez, W. Lai

7:00 am - 7:15 am  
Resource Utilization in a Pediatric Echocardiography Laboratory P. Banka  
7:15 am - 7:30 am  
Resource Utilization: How Many People Do We Need to Run? Results from an ASE Survey W. Lai  
7:30 am - 7:45 am  
Resource Utilization: Optimization of Workflow and Equipment L. Mertens  
7:45 am - 8:00 am  
Question and Answer

7:00 am - 8:00 am  
Stress Echo: Experts Bring Their Toughest Cases: Do you Agree With Their Interpretations?  - 200 C  
(Ticket Required for Admission)  
Moderator: S. Sawada

7:00 am - 7:15 am  
Case 1 R. McCully  
7:15 am - 7:30 am  
Case 2 S. Smart  
7:30 am - 7:45 am  
Case 3 S. Sawada  
7:45 am - 8:00 am  
Question and Answer

7:00 am - 8:00 am  
Workshop on CRT: Dyssynchrony and AV Optimization: How to Do  - 200 E (Ticket Required for Admission)  
Moderator: S. Lester

7:00 am - 7:12 am  
Overview A. Chen-Tournoux
7:12 am - 7:24 am  
Case 1: Dyssynchrony J. Gorcsan  
7:24 am - 7:36 am  
Case 2: Dyssynchrony S. Lester  
7:36 am - 7:48 am  
Case 3 AV Optimization R. Ronderos  
7:48 am - 8:00 am  
Case 4 AV Optimization A. Chen-Tournoux

8:00 am - 9:30 am  
Imaging Essentials: IAC Accreditation and Lab Operations  
- Lecture Hall 1  
Moderators: R. Stainback, E. Nemec

8:00 am - 8:15 am  
Practical Tips on Maintaining Quality and Efficiency R. Stainback  
8:15 am - 8:30 am  
Maintaining IAC Accreditation B. Gorman  
8:30 am - 8:45 am  
Protecting Ourselves While Maintaining Efficiency J. Marshall  
8:45 am - 9:00 am  
Echo on the Road M. Bremer  
9:00 am - 9:15 am  
Sonographers Preliminary Reporting: Pros and Cons P. Coon  
9:15 am - 9:30 am  
Integrating Contrast Echocardiography M. McCullough

SPECIAL EVENT 8:00 AM - 9:30 AM  
Live Scanning: Segmental Anatomy  
(Joint Pediatric / Adult Session) - Ballroom A

8:00 am - 8:45 am  
Adult D-TGA S. Phillips, J. Kreeger  
8:45 am - 9:30 am  
Adult L-TGA S. Phillips, J. Kreeger

SPECIAL EVENT 8:00 AM - 9:30 AM  
Clash of the Titans: Debates Between the Greats - Main Auditorium  
Moderators: S. Kaul, P. Douglas

8:00 am - 8:30 am  
Can Echo Reliably Assess LV Filling Pressures? J. Oh VS. A. Weyman  
8:30 am - 9:00 am  
9:00 am - 9:30 am  
Echo Should be Done in Screening for Athletes T. Abraham VS. P. Rahko
8:00 am - 9:30 am
Scientific Sessions Wrap-Up - Ballroom B
Moderators: J. Lindner, R. Hahn

8:00 am - 8:15 am
Novel Technology J. Lindner
8:15 am - 8:30 am
Valve Disease R. Hahn
8:30 am - 8:45 am
Cardiac Function M. Saric
8:45 am - 9:00 am
Pediatric Congenital L. Mertens
9:00 am - 9:15 am
Vascular/Pericardial N. Hamburg
9:15 am - 9:30 am
Question and Answer

10:00 am - 11:30 am
Imaging Essentials: Systolic Heart Failure - Lecture Hall 1
Moderators: L. Elvert, J. Hill

10:00 am - 10:20 am
Demographics: Who is at Risk? G. Francis
10:20 am - 10:40 am
How to Assess LV Function: Is it Just EF? Newer Modalities M. Biereg
10:40 am - 11:00 am
How Can Echo Distinguish Etiologies of Cardiomyopathy? Ischemic, Nonischemic, Stress-Induced, Infiltrative A. Woo
11:00 am - 11:20 am
How Can Echo be Used to Guide Treatment of Heart Failure? E. Velazquez
11:20 am - 11:30 am
Question and Answer

10:00 am - 11:30 am
Pediatric Oral Abstracts - Ballroom A
Moderators: L. Mertens, A. Powell

10:00 am - 10:15 am
PC-01: Comparison of Two-Dimensional Speckle-Tracking Echocardiography and Pressure-Volume Loop Analysis in Patients with Single Ventricle Physiology J. Buckley
10:15 am - 10:30 am
PC-02: Echocardiographic Estimation of Right Ventricular Stroke Work in Children with Pulmonary Arterial Hypertension: Comparison to Invasive Measurements M. Di Maria
10:30 am - 10:45 am
PC-03: Determinants of Resource Utilization in a Large Pediatric/Congenital Echocardiography Laboratory P. Banka
10:45 am - 11:00 am
PC-04: Left Atrial Mechanics in Children: Insights from Three-Dimensional Echocardiography, Magnetic Resonance Imaging and Strain Imaging Y. Wang
11:00 am - 11:15 am
PC-05: Two-Dimensional Measurement of Tricuspid Annular Plane Systolic Excursion in Children: Can it Substitute for an M-mode Assessment? M. Qureshi
11:15 am - 11:30 am
PC-06: Effect of Chronic Right Ventricular Volume Overload on Ventricular Interaction in Patients after Tetralogy of Fallot Repair A. Dragulescu

SPECIAL EVENT 10:00 AM - 11:30 AM

Athlete’s Heart: 360 Perspective - Main Auditorium
Moderator: K. Harris
10:00 am - 10:15 am
Physiology of Training on Heart: How Does the Heart Adapt? A. Baggish
10:15 am - 10:30 am
Sudden Death in Athletes: What are the Causes? M. Sherrid
10:30 am - 10:45 am
Can Imaging Help? T. Abraham
10:45 am - 11:00 am
The Marathon: Endurance vs. High-Intensity Training D. Prior
11:00 am - 11:15 am
Perspective from Team Physician A. Hutter
11:15 am - 11:30 am
Question and Answer

SPECIAL EVENT 1:00 PM - 2:30 PM

Today’s Most Significant Healthcare Trends Impacting Organizations (Featuring MedAxiom Consulting) - Ballroom B
Moderator: D. Forst
1:00 pm - 1:20 pm
Cardiology Megatrends J. Sauer
1:20 pm - 1:40 pm
Physician/Hospital Collaboration Trends: Employment and Independent Practice Models J. Sauer
1:40 pm - 2:00 pm
Physician Compensation Trends and the Impact of Physician Shortages J. Sauer
2:00 pm - 2:20 pm
Performance Benchmarking: How Do You Compare? L. Walsh
2:20 pm - 2:30 pm
Question and Answer
### TUESDAY, JULY 2

#### SCHEDULE

**1:00 pm - 2:30 pm**

**Controversies in Pediatric Echocardiography** - Ballroom A  
*Moderator: C. Fleischman*

1:00 pm - 1:15 pm  
Debate 1: Point of Care Echocardiography Should be Practiced in Pediatric ER - *Pro J. Fischer*  
1:15 pm - 1:30 pm  
Debate 1: Point of Care Echocardiography Should be Practiced in Pediatric ER - *Con P. Frommelt*

1:30 pm - 1:45 pm  
Debate 2: All Measurements of Cardiac Dimensions Should Use 2-D and Not M-Mode Imaging - *Pro L. Lopez*  
1:45 pm - 2:00 pm  
Debate 2: All Measurements of Cardiac Dimensions Should Use 2-D and Not M-Mode Imaging - *Con J. Simpson*

2:00 pm - 2:15 pm  
Debate 3: 3-D Echocardiography Can Replace Cardiac MRI for Measurement of RV Volumes - *Pro M. Friedberg*  
2:15 pm - 2:30 pm  
Debate 3: 3-D Echocardiography Can Replace Cardiac MRI for Measurement of RV Volumes - *Con A. Dorfman*

**SPECIAL EVENT 1:00 PM - 2:30 PM**

**Interpreting with the Masters** - Main Auditorium  
*Moderators: A. Klein, J. Gardin*

1:00 pm - 1:20 pm  
Kalmanson Lecture: Daniel Kalmanson: A Pioneer Leading the Way to Flow Doppler into the Heart *C. Veyrat*

1:20 pm - 1:35 pm  
Crazy Doppler Case  
1:35 pm - 1:50 pm  
Case of Hypertrophy *A. Pearlman*

1:50 pm - 2:05 pm  
What is That Thing in the Heart? *J. Tajik*

2:05 pm - 2:20 pm  
Case of Valve Dysfunction: What is the Cause? *N. Nanda*

2:20 pm - 2:30 pm  
Fevers and Dyspnea in the Tropics *M. Barbosa*

**1:00 pm - 2:30 pm**

**Academic/Career Training in Echo** - Lecture Hall 1  
*Moderators: J. Lindner, S. Wiegers*

1:00 pm - 1:20 pm  
How to Launch an Academic Career in 2013 *M. Quiñones*

1:20 pm - 1:40 pm  
Grant Writing and Funding *J. Lindner*

1:40 pm - 2:00 pm  
Core Lab: How to Start *P. Douglas*

2:00 pm - 2:20 pm  
Multimodality Training: How Should it be Done? *J. Shirani*

2:20 pm - 2:30 pm  
Question and Answer

**3:00 pm - 4:30 pm**

**Effects of the Changing Healthcare Environment on Cardiac Ultrasound: Speed Rounds** - Ballroom B  
*Moderators: D. Wiener, B. Byrd*

3:00 pm - 3:10 pm  
CV Coding Tips and Pitfalls *J. Rosenbloom*

3:10 pm - 3:25 pm  
Echo AUC Review and Impact on Patient Care *P. Ward*

3:25 pm - 3:35 pm  
Best Practices Using Quality Standards to Reduce/Control Costs *G. Rose*

3:35 pm - 3:45 pm  
Private Practice in an Accredited Lab Today *D. Orsinelli*

3:45 pm - 3:55 pm  
Integrating a Private Practice into a Hospital Setting *M. Main*

3:55 pm - 4:05 pm  
Echo in the Accountable Care Organization System *S. Maisey*

4:05 pm - 4:15 pm  
Reduction of Repeat Images *E. Gill*

4:15 pm - 4:20 pm  
Choosing Wisely *B. Byrd*

4:20 pm - 4:30 pm  
Question and Answer

**1:00 pm - 2:30 pm**

**Pulmonary Hypertension: Joint Pediatric Adult Session** - Ballroom A  
*Moderator: C. Fleischman*

1:00 pm - 1:15 pm  
Debate 1: Point of Care Echocardiography Should be Practiced in Pediatric ER - *Pro J. Fischer*

1:15 pm - 1:30 pm  
Debate 1: Point of Care Echocardiography Should be Practiced in Pediatric ER - *Con P. Frommelt*

1:30 pm - 1:45 pm  
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1:45 pm - 2:00 pm  
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2:00 pm - 2:15 pm  
Debate 3: 3-D Echocardiography Can Replace Cardiac MRI for Measurement of RV Volumes - *Pro M. Friedberg*

2:15 pm - 2:30 pm  
Debate 3: 3-D Echocardiography Can Replace Cardiac MRI for Measurement of RV Volumes - *Con A. Dorfman*

**3:00 pm - 4:30 pm**

**Cases You Should Know About** - Lecture Hall 1  
*Moderators: N. Burkule, J. Hung*

3:00 pm - 3:15 pm  
Echo from the ER to the OR

3:15 pm - 3:30 pm  
Valve Case from Around the World *M. Bansal*

3:30 pm - 3:45 pm  
Echo and Intervention

3:45 pm - 4:00 pm  
Echo and Oncology *I. Sebag*

4:00 pm - 4:15 pm  
Infected Aortic Valve Prosthesis *G. Habib*

4:15 pm - 4:30 pm  
Question and Answer
TUESDAY, JULY 2
SCHEDULE

3:00 pm - 4:30 pm
Echo in Stroke - Main Auditorium
Moderator: A. Poppas

3:00 pm - 3:15 pm
Cardiac Source of Embolism: What is Evidence? What are Etiologies? S. Saha

3:15 pm - 3:30 pm
Role of Echocardiography in Evaluation of Stroke R. Grimm

3:30 pm - 3:45 pm
TEE: When Can I Offer? When to Do in Evaluation of Stroke S. Homma

3:45 am - 4:00 pm
Aortic Atheroma: How to Grade. Impact on Therapy. When to Do Epiaortic Scanning S. Wiegers

4:00 pm - 4:15 pm
Paradoxical Embolism: PFO and ASD - Anatomy and Devices: Who Should be Referred for Closure in 2013 J. Carroll

4:15 pm - 4:30 pm
Question and Answer

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SUNDAY, JUNE 30, 2013
POSTER SESSION 1 (P1)
Exhibit & Poster Hall - Pages 56-71
Presented: 9 am - 4 pm
Meet the Investigators: 12 pm - 1 pm
Moderated Poster Session: 12 pm - 1 pm
Research Topics
Valvular Heart Disease.........................P1-01 through P1-50
Ventricular Function.........................P1-51 through P1-100
Contrast Echocardiography
and Molecular Imaging......................P1-101 through P1-117
Echocardiography in Arrhythmias/
Source of Embolism..........................P1-118 through P1-128
Echocardiography in Systemic Disease:
Diabetes Mellitus, Hypertension,
Obesity, Cancer.............................P1-129 through P1-155
Outcomes/Quality/
Echocardiography in Clinical Trials........P1-156 through P1-184
Vascular Disease.........................P1-185 through P1-194
Pericardial and Primary
Myocardial Diseases.......................P1-195 through P1-200

SONOGRAPHER INVESTIGATOR’S
AWARD COMPETITION (SIA)
Exhibit & Poster Hall - Pages 53-54
Moderated Poster Presentations: 12 pm - 1 pm
Research Topics
Pediatric and Adult
Congenital Heart Disease ..................SIA-1 and SIA-4
Doppler and Strain Echocardiography ..........SIA-2
Echocardiography in Systemic Disease:
Diabetes Mellitus, Hypertension, Obesity, Cancer ..........SIA-4

MONDAY, JULY 1, 2013
POSTER SESSION 2 (P2)
Exhibit & Poster Hall - Pages 72-86
Presented: 9 am - 4 pm
Meet the Investigators: 12 pm - 1 pm
Moderated Poster Session: 12 pm - 1 pm
Research Topics
3D Echocardiography..........................P2-01 through P2-48
Ischemic Heart Disease/
Stress Echocardiography ......................P2-49 through P2-63
Doppler and Strain Echocardiography ....P2-64 through P2-132
Intraoperative Echocardiography
and TEE......................................P2-133 through P2-142
Pediatric and Adult Congenital
Heart Disease............................P2-143 through P2-187

YOUNG INVESTIGATOR’S
AWARD COMPETITION (YIA)
Main Auditorium - Page 53
Oral Presentations: 10:15 am - 11:45 am
Research Topics
Doppler and Strain Echocardiography ..........YIA-1
Vascular Disease.............................YIA-2
Outcomes/Quality/
Echocardiography in Clinical Trials.............YIA-3
Valvular Heart Disease......................YIA-4

CLINICAL CASES COMPETITION (CC)
Lecture Hall 1 - Page 54
Oral Presentations: 3:30 pm - 5 pm
Topics
Cardiovascular Ultrasound Imaging
in Diagnosis, Clinical Decision-Making,
and Patient Management....................CC-01 through CC-10

TUESDAY, JULY 2, 2013
PEDIATRIC ORAL ABSTRACTS (PC)
Ballroom A - Page 55
Oral Presentations: 10 am - 11:30 am
Research Topics
Pediatric and Adult Congenital
Heart Disease............................PC-01 through PC-06
ASE sincerely thanks the following volunteers for their time reviewing this year’s original science and clinical case submissions.

**Abstract Chair:**
Jonathan R. Lindner, MD, FASE  
M. Lowell Edwards Professor of Cardiology, Oregon Health & Science University, Portland, OR

**Abstract Co-Chair:**
Rebecca T. Hahn, MD, FASE  
Director of Interventional Echocardiography, Center for Interventional Vascular Therapy, New York, NY  
NewYork Presbyterian Hospital/Columbia University Medical Center, New York, NY  
Associate Professor of Clinical Medicine, Columbia College of Physicians and Surgeons, New York, NY

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Timothy C. Slesnick, MD  
Roman M. Sniecinski, MD, FASE  
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Malissa J. Wood, MD, FASE  
Xin Zeng, MD
2013 ARTHUR E. WEYMAN YOUNG INVESTIGATOR’S AWARD COMPETITION (YIA)

ASE congratulates this year’s finalists and thanks the National Board of Echocardiography™ (NBE) for its continued support of this annual competition.

Poster Presentations: Sunday, June 30 and Monday, July 1 in the Exhibit & Poster Hall

Oral Presentations: Monday, July 1, 10:15 am - 11:45 am in the Main Auditorium

Research Topics

Doppler and Strain Echocardiography .......................................................... YIA-1
Vascular Disease ......................................................................................... YIA-2
Outcomes/Quality/Echocardiography in Clinical Trials ...................... YIA-3
Valvular Heart Disease .............................................................................. YIA-4

The authors have no disclosures to make.

YIA-1
Impact of Vagal Nerve Stimulation on Left Atrial Structure and Function in a Canine Model of Tachycardia-induced Dilated Cardiomyopathy
Kenya Kusunose, Youhua Zhang, Todor N. Magalev, David R. Van Wagoner, James D. Thomas, Zoran B. Popović. Cleveland Clinic, Cleveland, OH
Presented by Kenya Kusunose, MD, PhD

YIA-2
Differences in Lean Body Mass May Explain the Racial Disparities Seen in Carotid Intima-Media Thickness in Obese Children
Shahryar M. Chowdhury, Melissa Henshaw, Brad Friedman, Janet Carter, Bryana Levitan, Tom Hulsey. Medical University of South Carolina, Charleston, SC
Presented by Shahryar M. Chowdhury, MD

YIA-3
An Educational Intervention Reduces the Rate of Inappropriate Transthoracic Echocardiograms in Ambulatory Care
Sacha R. Bhatia, Creagh E. Milford, Danita Sanborn-Yoerger, Michael H. Picard, Rory B. Weiner. Massachusetts General Hospital, Boston, MA
Presented by Sacha R. Bhatia, MD, MBA

YIA-4
Diverse Mechanisms are Responsible for Low Gradient in Severe Aortic Stenosis beyond Low Ejection Fraction and High Vascular Load
Alamelu Ramamurthi, Deeb Salem, Natesa G. Pandian. Tufts Medical Center, Boston, MA
Presented by Alamelu Ramamurthi, MD

2012 EUROPEAN ASSOCIATION OF CARDIOVASCULAR IMAGING YOUNG INVESTIGATOR’S AWARD WINNER

Poster Presentation: Sunday, June 30 and Monday, July 1 in the Exhibit & Poster Hall

Moderated Poster Presentation: Monday, July 1, 12 pm - 1 pm

Research Topic

3D Echocardiography ................................................................................ EUR-1

The presenter has no disclosures to make.

EUR-1 Moderated Poster
Three-dimensional Intracardiac Blood Velocity and Flow from Compounded 3D Echo Colour Doppler Images
Alberto Gomez, PhD, St. Thomas Hospital, London, United Kingdom

2013 JAPANESE SOCIETY OF ECHOCARDIOGRAPHY YOUNG INVESTIGATOR’S AWARD WINNER

Poster Presentation: Sunday, June 30 and Monday, July 1 in the Exhibit & Poster Hall

Moderated Poster Presentation: Monday, July 1, 12 pm - 1 pm

Research Topic

3D Echocardiography ................................................................................ JSE-1

The presenter has no disclosures to make.

JSE-1 Moderated Poster
Prognostic Implication of the Mitral Valve Tenting Geometry in Patients with Dilated Cardiomyopathy: Transthoracic Real-Time 3D Echocardiographic Study
Reiko Toida, MD, University of Miyazaki Hospital, Miyazaki, Japan
Presented by Reiko Toida, MD

SONOGRAPHER INVESTIGATOR’S AWARD COMPETITION (SIA)

Poster Presentations: Sunday, June 30 and Monday, July 1 in the Exhibit & Poster Hall

Moderated Poster Presentations: Sunday, June 30, 12 pm - 1 pm

Research Topics

Pediatric and Adult Congenital Heart Disease .................................. SIA-1 and SIA-4
Doppler and Strain Echocardiography ....................................................... SIA-2
Echocardiography in Systemic Disease:
Diabetes Mellitus, Hypertension, Obesity, Cancer ......................... SIA-4

Author Disclosure Key: 1) Speakers’ Bureau; 2) Consultant/Advisor; 3) Stock Ownership (not including stocks owned in a managed portfolio); 4) Research Grant (primary investigator); 5) Employment Affiliation; 6) Royalty/Patents.
SIA-1
Fetal Cardiac Imaging in Early Pregnancy: Analysis of 254 Echocardiograms Performed Between 11+0 and 16+6 Weeks Gestation
Elena Sinkovskaya1, Jonathan Fleenor2, Anna Klassen1, Sharon Horton1, Annette Sclater1, Kathy Tice1, Lisa Walton1, Alfred Abuhamed1. 1Eastern Virginia Medical School, Norfolk, VA; 2Children’s Hospital of the King’s Daughters, Norfolk, VA
Presented by Elena Sinkovskaya, RDCS

SIA-2
Global Left Ventricular Systolic Strain: An Inter-vendor Comparison in 298 Patients with Known or Suspected Cardiomyopathy
Presented by Joshua G. Fosland, RDCS

SIA-3
Effects of Sleep Apnea on Cardiac Remodeling in the Wisconsin Sleep Cohort Study
Claudia E. Korcarz, Jodi H. Barnet, Mae Hla, Terry B. Young, Paul E. Peppard, James H. Stein. University of Wisconsin, Madison, WI
Author Disclosures: J. Stein: 2 (Takeda, Abbot, Lilly), 6 (WARF)
Presented by Claudia E. Korcarz, DVM, RDCS, FASE

SIA-4
High Intensity Athletic Training in Elite High School Athletes: Impact of Years of Training on Myocardial Deformation
Rebecca K. Lindquist, Chelsea L. Reece, Angela R. Miller, Patrick W. O’Leary, Frank Cetta, Benjamin W. Eide. Mayo Clinic, Rochester, MN
Presented by Rebecca K. Lindquist, RDCS

CC-02
A Curious Case of Endomyocardial Fibrosis
Damian L. Roper, Samuel D. H. Hillier, Darryl J. Burstow, Abhishek P. Bhaskaran, Sushil Luis, David Platts. The Prince Charles Hospital, Brisbane, Australia
Presented by Damian L. Roper, MBChB

CC-03
Implantation of Tricuspid Valve Leaflet on Pacemaker Lead
Megan Yamat, Karima Addetia, Nicole Bhave, Roberto Lang. University of Chicago Hospital, Chicago, IL
Author Disclosures: R. Lang: 4 (Phillips)
Presented by Megan Yamat, RDCS, RCS

CC-04
A Case of Anomalous Origin of the Left Coronary Artery Arising from the Right Pulmonary Artery in an Infant with a Large VSD
Joe Kreeger. Children’s Healthcare of Atlanta, Atlanta, GA
Presented by Joe Kreeger, RCCS, RDCS, FASE

CC-05
Transcatheter Repair of Acute Post-Myocardial Infarction Left Ventricular Pseudoaneurysm
Robert Kumar, Chad Kliger, Gila Perk, Itzhak Kronzon, Vladimir Jelnin, Carlos E. Ruiz. NSLIJHS - Lenox Hill Hospital, New York, NY
Presented by Robert Kumar, MD

CC-06
Percutaneous Paravalvular Leak Closure and Implantation of a Melody Valve-in-Valve
Robert Kumar, Chad Kliger, Itzhak Kronzon. NSLIJHS - Lenox Hill Hospital, New York, NY
Presented by Robert Kumar, MD

CC-07
Prosthetic Mitral Valve Obstruction: Accurate Diagnosis by 3D-Transesophageal Echocardiography
Rajesh Janardhanan, Kapildeo Lotun, Zain Khalbey, Mary C. Smith, Todd Rutter, Darima Nemanova, Mark J. Friedman. University of Arizona, Tucson, AZ
Presented by Rajesh Janardhanan, MD, MRCP, FASE
CC-10
Right Atrial Mass in Eosinophilic Myocarditis
Samuel D. Hillier, Damian Roper, Andrew Small, Darryl Burstow, David Platts. The Prince Charles Hospital, Brisbane, Australia

Presented by Darryl Burstow, MBBS

PC-01
Comparison of Two-Dimensional Speckle-Tracking Echocardiography and Pressure-Volume Loop Analysis in Patients with Single Ventricle Physiology
Jason Buckley1, Ryan Butts1, Shahryar Chowdhury1, Anthony Hlavacek1, Sachin Khambadkone1, Tain-Yen Hsia2, G. Hamilton Baker1. 1Medical University of South Carolina, Charleston, SC; 2Great Ormond Street Hospital for Children, London, United Kingdom

Presented by Jason Buckley, MD

PC-02
Echocardiographic Estimation of Right Ventricular Stroke Work in Children with Pulmonary Arterial Hypertension: Comparison to Invasive Measurements
Michael V. Di Maria1, Bruce F. Landeck, II1, Adel Younoszai1, Luc Mertens3, D. Dunbar Ivy1, Kendall Hunter1, Mark K. Friedberg1. 1Children’s Hospital Colorado, Aurora, CO; 2Hospital for Sick Children, Toronto, ON, Canada; 3University of Colorado at Denver Anschutz Medical Campus, Aurora, CO

Presented by Michael V. Di Maria, MD

PC-03
Determinants of Resource Utilization in a Large Pediatric/Congenital Echocardiography Laboratory
Puja Banka, Barbara Schaetzle, Kimberlee Gauvreau, Tal Geva. Boston Children’s Hospital, Boston, MA

Presented by Puja Banka, MD

PC-04
Left Atrial Mechanics in Children: Insights from Three-Dimensional Echocardiography, Magnetic Resonance Imaging and Strain Imaging

Presented by Yan Wang, RDCS

PC-05
Two-Dimensional Measurement of Tricuspid Annular Plane Systolic Excursion in Children: Can it Substitute for an M-mode Assessment?
Muhammad Y. Qureshi, Benjamin W. Eidem, Chelsea L. Reece, Patrick W. O’Leary. Mayo Clinic, Rochester, MN

Presented by Muhammad Y. Qureshi, MBBS

PC-06
Effect of Chronic Right Ventricular Volume Overload on Ventricular Interaction in Patients after Tetralogy of Fallot Repair
Andreea R. Dragulescu, Lars Grosse-Wortmann, Mark K. Friedberg, Luc Mertens. Hospital for Sick Children, Toronto, ON, Canada

Presented by Andrea R. Dragulescu, MD, PhD
Valvular Heart Disease
P1-01 through P1-50

P1-01 Moderated Poster
Differences in Baseline Echo Parameters in Patients with Varying Severity of Paravalvular Regurgitation Following Transcatheter Valve Replacement
Rebecca T. Hahn1, Pamela S. Douglas2, Philippe Pibarot3, Tom McAndrew4, William Stewart4, Neil Weissman5, Matthew Williams4, Susheel Kodali1, Martin Leon1. 1Columbia University, New York, NY; 2Duke University Medical Center, Durham, NC; 3Laval University, Quebec, QC, Canada; 4Cleveland Clinic Foundation, Cleveland, OH; 5Washington University School of Medicine, St. Louis, MO.

Author Disclosures: M. Williams: 2 (Edwards Lifesciences); S. Kodali: 2 (Edwards Lifesciences); M. Leon: 2 (Edwards Lifesciences, Medtronic Vascular)

P1-02 Moderated Poster
Impact of Prosthesis-Patient Mismatch on LV Mass Regression in Aortic Stenosis in the PARTNER Trial
Philippe Pibarot1, William Stewart2, Neil J. Weissman3, Rebecca T. Hahn4, Brian R. Lindman5, Lars Svensson6, Howard C. Herrmann6, Michael Mack7, Scott Lim8, Vinod H. Thourani9, John Webb10, D. Craig Miller11, Thomas C. McAndrew12, Martin B. Leon13, Pamela S. Douglas14. 1Department of Medicine, Laval University, Quebec, QC, Canada; 2Cleveland Clinic Foundation, Cleveland, OH; 3Columbia University Medical Center/ University of British Columbia, Vancouver, BC, Canada; 4Cleveland Clinic Foundation, Cleveland, OH; 5Washington University School of Medicine, St. Louis, MO; 6Hospital of the University of Pennsylvania, Philadelphia, PA; 7Medical City Dallas Hospital, Dallas, TX; 8University of Virginia, Charlottesville, VA; 9Emory University, Atlanta, GA; 10St. Paul’s Hospital/ University of British Columbia, Vancouver, BC, Canada; 11Stanford University, Stanford, CA; 12Cardiovascular Research Foundation, New York, NY; 13Columbia University Medical Center/ Cardiovascular Research Foundation, New York, NY; 14Duke Clinical Research Institute, Durham, NC.

Author Disclosures: L. Svensson: 2 (Edwards Lifesciences); H. Herrmann: 4 (Edwards Lifesciences), 2 (St. Jude Medical, Paieon), 3 (Microinterventional Devices); V. Thourani: 2 (Edwards Lifesciences, Sorin Medical, St. Jude Medical, DirectFlow); J. Webb: 2 (Edwards Lifesciences); M. Leon: 2 (Edwards Lifesciences); P. Douglas: 4 (Edwards Lifesciences)

P1-03 Moderated Poster
Left Ventricular Remodeling After Mitral Valve Surgery in Patients with Organic Mitral Regurgitation: Effect of Volume Load and of Timing of Surgery
Thierry Le Tourneau1, Yan Topilsky2, Joseph Inamo2, Douglas Mahoney2, Rakesh Suri2, Hartzell Schaff2, Maurice Enriquez-Sarano2. 1Institut du Thorax, Nantes, France; 2Mayo Clinic, Rochester, MN

P1-04 Moderated Poster
Mitral Leaflet Elongation Caused by Increased Diastolic Shear-stress Mediated Forces: Observations in Patients With Bicuspid Aortic Valve

P1-05 Moderated Poster
Differential Left Ventricular Outflow Tract Remodeling and Dynamics in Aortic Stenosis
Praveen Mehrotra1, Aidan W. Flynn2, Katrijn Jansen2, Timothy C. Tan3, Gary S. Mak4, Xin Zeng4, Michael H. Picard4, Jonathan Passeri5, Judy Hung5. 1Thomas Jefferson University Hospital, Philadelphia, PA; 2Massachusetts General Hospital, Boston, MA

P1-06 Moderated Poster
Predictors of Impact of Prosthesis-Patient Mismatch following Transcatheter Aortic Valve Replacement - A PARTNER Trial Cohort A Analysis
Philippe Pibarot1, Rebecca T. Hahn2, Neil J. Weissman3, William J. Stewart4, Brian R. Lindman5, Lars G. Svensson5, Howard C. Herrmann6, Michael J. Mack7, Scott Lim8, Vinod H. Thourani9, John Webb10, D. Craig Miller11, Thomas C. McAndrew12, Susheel K. Kodali1, Pamela S. Douglas14, Martin B. Leon13. 1Dept. of Medicine, Laval University/ Quebec Heart & Lung Institute, Quebec, QC, Canada; 2Columbia University Medical Center/ NY Presbyterian Hospital, New York, NY; 3MedStar Research Institute/ Georgetown University, Washington, DC; 4Cleveland Clinic Foundation, Cleveland, OH; 5Washington University School of Medicine, St. Louis, MO; 6Hospital of the University of Pennsylvania,
P1-07  Moderated Poster
Using the Annulus Diameter Instead of Left Ventricular Outflow Tract Diameter Improves Agreement Between Effective Orifice Area and Aortic Valve Area on Invasive Hemodynamics
Troy M. LaBounty1, Stanley Chetcuti1, Paul M. Grossman1, George Michael Deeb1, Himanshu Patel1, Anna Boother1, Antonio Conte1, Ella Kazerooni1, Smita Patel1, David Bach1. 1University of Michigan, Ann Arbor, MI; 2Cedars Sinai Medical Center, Los Angeles, CA

P1-09  Type-B Natriuretic Peptide Activation in Aortic Stenosis
Marie-Annick Clavel, Joseph Malouf, Hector Michelena, Maurice Enriquez-Sarano. Mayo Clinic, Rochester, MN

P1-10  Validation of Accurate Methodology for Stroke Volume and Effective Orifice Area Calculation following Transcatheter Aortic Valve Replacement
Omar K. Khalique, Mathew Williams, Susheel Kodali, Martin Leon, Rebecca Hahn. Columbia University Medical Center, New York, NY
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P1-11  Left Atrial Shape is an Independent Predictor of Embolic Events in Patients with Mitral Stenosis
Maria P. Nunes1, Mark D. Handschumacher2, Robert A. Levine3, Marcia M. Barbosa2, Vinicius T. Carvalho1, William A. Esteves4, Xin Zeng5, Timothy C. Tan2, Judy Hung2. 1Federal University of Minas Gerais, Belo Horizonte, Brazil; 2Cardiac Ultrasound Lab, Massachusetts General Hospital, Harvard Medical School, Boston, MA; 3Beth Israel Deaconess Medical Center, Boston, MA; 4Boston University School of Medicine, Boston, MA

P1-12  Angle Correction for Accurate Quantification of Mitral Regurgitation by Proximal Flow Convergence Method
Byung Joo Sun, Uk Jo, Jeong Yoon Jang, Min Jung Sin, Min Kyoung Jang, Dae-Hee Kim, Jong-Min Song, Duk-Hyun Kang, Jae-Kwan Song. Asan Medical Center, Seoul, Republic of Korea

P1-13  Comparison of Dynamic Motion in Aortic Annular Geometry with Bicuspid versus Tricuspid Aortic Valve: A Real-Time Three-Dimensional Transesophageal Echocardiography Study
Kentarou Shibayama, Kenji Harada, Jun Tanaka, Javier Berdejo, Takahiro Shiota. Cedars Sinai Medical Center, Los Angeles, CA

P1-14  Frequency, Determinants, and Outcome of Left Ventricular Dysfunction in Patients with Severe Mitral Stenosis: A Speckle Tracking Strain Echocardiography Study
Makoto Amaki1, Partho Sengupta1, Mahesh Fulwani2, Sunil Washimkar2, Georg Golaisch3, Giuseppe Caracciolo1, Gianni Pedrizzetti3, Jagat Narula4, Shantanu Sengupta2. 1Mount Sinai Hospital, New York, NY; 2Sengupta Hospital and Research Institute, Nagpur, India

P1-15  Ventriculoarterial Coupling in Severe Aortic Stenosis: Relation to Symptoms and Heart Failure
Ricardo A. Migliore, Maria E. Adaniya, Miguel Barranco, Guillermo Miramont, Horacio Tamagusuku. Hospital Eva Perón, San Martín, Pcia de Buenos Aires, Argentina

P1-16  Echocardiographic Evidence of Mitral Valve Growth in Mitral Valve Prolapse
Brienne Hackman1, Robert A. Levine2, Ramachandran S. Vasan3, Warren J. Manning1, Francesca N. Delling1. 1Beth Israel Deaconess Medical Center, Boston, MA; 2Massachusetts General Hospital, Boston, MA; 3Boston University School of Medicine, Boston, MA

P1-17  Prevalence of Bicuspid Aortic Valve and Mitral Valve Prolapse and Their Main Correlates in Free-Living Adults: The Brazilian Longitudinal Study of Adult Health (ELSA-Brasil)
Murilo Foppa1, Angela B. S. Santos1, Claudia V. Freire2, Luciana P. Fernandes1, Alexandre Cauduro3, Marina Bessel4, Antonio L. P. Ribeiro2, Bruce B. Duncan1. 1Federal University of Rio Grande do Sul, Porto Alegre, Brazil; 2Federal University of Minas Gerais, Belo Horizonte, Brazil; 3Federal University of Bahia, Salvador, Brazil; 4University of Sao Paulo, Sao Paulo, Brazil

P1-18  Predictors for the Development of Heart Failure in Patients with Chronic Aortic Regurgitation
Steven J. Lavine. University of Florida/Jacksonville, Jacksonville, FL
P1-19
Strain Echocardiography Detects Underlying Diastolic Dysfunction in Patients with Symptomatic Mitral Stenosis
Mackram F. Eleid, Paul Sorajja, Rick A. Nishimura, Sorin V. Pislaru. Mayo Clinic, Rochester, MN

P1-20
Right and Left Ventricles Exhibited Differential Patterns of Remodeling Following Mitral Valve Repair Assessed by Real-Time Three-Dimensional Echocardiography
Qiong Zhao, Kameswari Maganti, Bonnie J. Kane, Marsha T. Ma, Vera H. Rigolin. Northwestern University, Chicago, IL

P1-21
Diastolic Heart Failure in Severe Aortic Stenosis: the Role of Left Atrial Function and Arterial Stiffness
Ricardo A. Migliore, Maria E. Adaniya, Miguel Barranco, Guillermo Miramont, Horacio Tamagusuku. Hospital Eva Perón, San Martín, Pcia de Buenos Aires, Argentina

P1-22
Three-Dimensional Assessment of Tricuspid Valve Remodeling in Pulmonary Hypertension
Karima Addetia, Megan Yamat, Lynn Weinert, Amit R. Patel, Victor Mor-Avi, Roberto M. Lang. University of Chicago, Chicago, IL

P1-23
Mitral Valve Prolapse: Differences in Clinical, Echocardiographic, and Long-Term Outcomes based on the Involved Mitral Valve Leaflets
Peyman Naji, Fadi Asfahan, Tyler Barr, Richard Grimm, A. Marc Gillinov, L. Leonardo Rodriguez, Tomislav Mihaljevic, Brian P. Griffin, Milind Y. Desai. Cleveland Clinic Foundation, Cleveland, OH

P1-24
Not Aortic Stenosis Severity but High Valvuloarterial Impedance Predicts Syncope in Aortic Stenosis
Kenji Harada, Kentaro Shibayama, Javier Berdejo Gago, Takahiro Shioti. Cedars-Sinai Medical Center, Los Angeles, CA

P1-25
Myxomatous Mitral Valve Disease Morphological Characteristics: Are There Any Gender Disparities?
Shmuel Schwartzenberg¹, Alexander Sagie², Mordechai Vaturi². ¹Massachusetts General Hospital, Boston, MA; ²Rabin Medical Center, Petah Tikva, Israel

P1-26
Impaired Systolic Myocardial Deformation May Contribute to Left Ventricular Diastolic Dysfunction in Severe Aortic Stenosis with Preserved Ejection Fraction
Eddy Barasch, Florentina Petillo, Simcha Polack, Peter D-Y Rhee, Nathaniel Reichek. St. Francis Hospital/Stony Brook University, Roslyn, NY

P1-27
Diagnostic Ability of Adult Unicuspid Aortic Valve by Echocardiography
Go Hashimoto¹, Makoto Suzuki¹, Hisao Yoshikawa¹, Takenori Otsuka¹, Yukiko Kusunose¹, Isamu Kawase², Hiromasa Yamashita², Yukinari Nozawa³, Shigeyuki Ozaki³, Masato Nakamura³, Kaoru Sugi³. ¹Division of Cardiovascular Medicine, Toho University Ohashi Medical Center, Tokyo, Japan; ²Division of Cardiovascular Surgery, Toho University Ohashi Medical Center, Tokyo, Japan

P1-28
Tricuspid Regurgitation in Patients with Permanent Pacemakers and Implantable Cardioverter-Defibrillators
Celia Catherine C. Uy, Michael-Joseph Agbayani, Pipin Kojodjojo, Swee-Chong Seow, Tiong Cheng Yeoh, Lieng Hsi Ling, Raymond Ching Chiew Wong, Toon Wei Lim. National University Heart Centre Singapore, Singapore, Singapore

P1-29
Hemodynamic Determinants of Functional Class in Patients with Severe Aortic Stenosis and Preserved Systolic Function. Parallel Echocardiographic and Cardiac Catheterization Study
Valeri Meledin¹, Gera Gandelman¹, Jacob Fabricant¹, Sorel Goland¹, Jacob George¹, Sarah Shimon³. ¹Kaplan Medical Center, Rehovot, Israel; ²Kaplan Medical Center, Doar na sde gat, Israel

P1-30
Atrial Fibrillation is Associated With Marked Biventricular Dysfunction in Chronic Severe Degenerative Mitral Regurgitation

P1-31
Rheumatic Heart Disease: Echocardiographic Review of an Ethnically Diverse Underserved Population
Salaheldin A. Abusin, Yohannes Biyssa, Najamul Ansari, Asimul H. Ansari. John H. Stroger, Jr. Hospital of Cook County, Chicago, IL

P1-32
Left Atrial Function Affects Exercise-Induced Pulmonary Hypertension in Patients with Asymptomatic Severe Mitral Regurgitation: A Speckle Tracking Echocardiography Study
Ryo Kamijima, Kengo Suzuki, Masaki Izumo, Kei Mizukoshi, Manabu Takai, Akio Hayashi, Yoshihiro Akashi. St. Marianna University School of Medicine, Kawasaki, Japan

P1-33
Severe Aortic Stenosis Without or With Mild Valvular Calcification Evaluated by 2-D Transesophageal Echocardiography
Eddy Barasch, Jillian M. Katz, Florentina Petillo, Wendy Stovold, Peter D-Y Rhee, Simcha Pollack. St. Francis Hospital/Stony Brook University, Roslyn, NY
P1-34
Severe Low-Flow Low-Gradient Aortic Stenosis by Echocardiography: Is an Unreliable Predictor of Aortic Stenosis Classification by Invasive Hemodynamics
Troy M. LaBounty1, Stanley Chetcuti1, Paul M. Grossman1, George Michael Deeb1, Himanshu Patel1, Anna Booher1, Antonio Conte2, Ella Kazerooni1, Smita Patel1, David Bach1. 1University of Michigan, Ann Arbor, MI; 2Cedars Sinai Medical Center, Los Angeles, CA

P1-35
Doppler Evaluation of a Functional Patient Specific 3D Printed Model of Severe Aortic Valve Stenosis
Matthew Jackson, Dimitrios Maragiannis, Stephen Igo, Michael Reardon, Stephen Little. Methodist Hospital, Houston, TX

P1-36
Visual Estimation of the Severity of Aortic Stenosis and the Calcium Burden by Two Dimensional Echocardiography: Is it Reliable?
Nishath Quader1, Susan Wilansky1, Roger Click2, Hari Chaliki1.
1Mayo Clinic Arizona, Phoenix, AZ; 2Mayo Clinic, Rochester, MN

P1-37
Prognostic Implications of Coexisting Disorders in Patients with Degenerative Calcific Aortic Stenosis
Richard A. Mills, Alamelu Ramamurthi, Iliana Hurtado, Natesa G. Pandian. Tufts Heart Valve Center, Tufts Medical Center, Boston, MA

P1-38
Prevalence and Demographic Distribution of Echocardiographic Detected Valvular Dysfunction in Free-Living Adults: The Brazilian Longitudinal Study of Adult Health (ELSA-Brasil)
Murilo Foppa1, Angela B. S. Santos1, Luciana P. Fernandes2, Claudia V. Freire1, Rodolfo Sharovsky3, Marina Bessel1, Paulo A. Lotufo4, Bruce B. Duncan5. 1Federal University of Rio Grande do Sul, Porto Alegre, Brazil; 2Federal University of Bahia, Salvador, Brazil; 3Federal University of Minas Gerais, Belo Horizonte, Brazil; 4University of Sao Paulo, Sao Paulo, Brazil

P1-39
Pulmonary Hypertension and Aortic Valve Stenosis: Implications of Left Atrial Remodeling
David Inyangetor, Katharine Decena, Richard Feinn, Christopher Steele, Mary Noory, Erick Avelar. University of Connecticut Health Center, Farmington, CT

P1-40
Does Functional Mitral Regurgitation Alter Prognosis in Patients with Advanced Cardiomyopathy?
Samer Mowakea1, Aeshita Dwivedi2, Scott Kinlay3, Jason Grossman1, Gaurav Parikh1, Jill Grounds1, Zelmira Curillova1, Deepak Bhatt1, Jayashri Aragam1. 1West Roxbury VA Medical Center, West Roxbury, MA; 2Boston Medical Center, Boston, MA

P1-41
Surgery Promotes Early Postoperative Changes in Left Atrial Volume and Function in Non-ischemic Symptomatic Mitral Regurgitation: A Three-dimensional Echocardiography Study
David C. S. Le Bihan1, Orlando Campos2, Jorge Eduardo Assef3, Rodrigo Bellio Mattos Barretto1, Dorival Julio Della Togna1, Claudio Henrique Fischer2, Valdir Ambrósio Moisés2, Mohamed Hassan Saleh1, Camilo Abdulmassih Neto1, Angelo Amato Vicenzo de Paola2, Amanda Guerra Moraes Rego Sousa1. 1Dante Pazzanese Institute of Cardiology, Sao Paulo, Brazil; 2Federal University of Sao Paulo UNIFESP, Sao Paulo, Brazil

P1-42
Echocardiographic Predictors of Pulmonary Hypertension in Patients with Aortic Stenosis and Preserved Left Ventricular Function
Katharine Decena1, David Inyangetor2, Christopher Steele1, Mary Noory3, Erick Avelar1. 1University of Connecticut Health Center, Farmington, CT; 2Quinnipiac University, Hamden, CT

P1-43
Relationship Between Aortic Valve Calcification Evaluated by 2D Transesophageal Echocardiography and Aortic Stenosis Severity
Eddy Barasch, Jillian M. Katz, Florentina Petillo, Simcha Pollack, Peter D-Y Rhee, Wendy Stovold, Nathaniel Reichek. St. Francis Hospital/Stony Brook University, Roslyn, NY

P1-44
The Addition of Invasive Hemodynamics to Echocardiography Findings Increases the Proportion Patients Achieving Hemodynamic Criteria for Transcatheter Aortic Valve Implantation
Troy M. LaBounty1, Stanley Chetcuti1, Paul M. Grossman1, George Michael Deeb1, Himanshu Patel1, Anna Booher1, Antonio Conte2, Ella Kazerooni1, Smita Patel1, David Bach1. 1University of Michigan, Ann Arbor, MI; 2Cedars Sinai Medical Center, Los Angeles, CA

P1-45
Echocardiographic Predictors for Exercise Intolerance in Patients With Asymptomatic Degenerative Mitral Regurgitation
Masaki Izumo, Kengo Suzuki, Ryo Kamijima, Kei Mizukoshi, Manabu Takai, Seisyou Kou, Hiromitsu Sekizuka, Naohiko Osada, Kazuto Omiya, Kazuhiro Izawa, Fumihiko Miyake, Yoshihiro J. Akashi. St. Marianna University School of Medicine, Kawasaki, Japan

P1-46
Predictors of New-Onset Atrial Fibrillation in Patients with Moderate-Severe/Severe Myxomatous Mitral Regurgitation Undergoing Exercise Echocardiography
Peyman Najj, Fadi Asfahan, Tyler Barr, Richard Grimm, A. Marc Gillinov, L. Leonardo Rodriguez, Tomislav Mihaljevic, Brian P. Griffin, Milind Y. Desai. Cleveland Clinic Foundation, Cleveland, OH
P1-47  Development of a Multi-Modality MRI Compatible Circulatory Flow System for the Functional Assessment of Mitral Valve Prostheses
Methodist Hospital, Houston, TX

P1-48  Assessing Mitral Valve Area by Color-Guided Planimetry in Rheumatic Mitral Stenosis: A New Method Using 3D-Echocardiography
Maria P. Nunes1, Mark D. Handschumacher2, Xin Zeng2, Marcia M. Barbosa1, Robert A. Levine3, Timothy C. Tan4, Judy Hung5.
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P1-49  Left Ventricular Electrocardiographic Strain Pattern is Associated with an Abnormal Global Longitudinal Strain in Patients with Severe Aortic Stenosis and Normal Ejection Fraction
Gerson D. Valdez, Alfonso Tolentino, Orlando Santana, Gervasio A. Lamas, Juan C. Brenes. Mount Sinai Medical Center, Miami Beach, FL

P1-50  Ischemic Mitral Regurgitation - Myocardial Scarring and Left Ventricular Function: Cardiovascular Magnetic Resonance Imaging Combined with Echocardiography
Agata M. Lesniak-Sobelga1, Magdalena Kostkiewicz1, Ewa Wicher-Muniak2, Piotr Musialek1, Robert Banys2, Piotr Podolec1.
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Go Hashimoto, Makoto Suzuki, Hisao Yoshikawa, Yukiko Kusunose, Takenori Otsuka, Masato Nakamura, Kaoru Sugi.
Division of Cardiovascular Medicine, Toho University Ohashi Medical Center, Tokyo, Japan

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Echocardiographic Derived LVEF Enhances the Risk Stratification of the CHADS-Vasc Score in Heart Failure Patients with Atrial Fibrillation
Arnold J. Hite, Abiodun Ishola, Sakima A. Smith, Ayesha K. Hasan.
The Ohio State University Medical Center, Columbus, OH

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Right Ventricular Performance: A New Systematic Echocardiographic Measure of Mechanical Efficiency in Pulmonary Hypertension
Angel López-Candales, Francisco R. Lopez, Jean Elwing. University of Cincinnati College of Medicine, Cincinnati, OH

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Victor Mor-Avi1, Wendy Tsang1, Mark Gajjar1, Benjamin H. Freed1, Maria Cristina Abduch2, Ivan S. Salgo3, Roberto M. Lang1.
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Steven J. Lavine. University of Florida/Jacksonville, Jacksonville, FL

P1-56  Indexing the E/e’ to Stroke Volume as a Predictor of LV Filling Pressures at Baseline and with Hemodynamic Perturbations
Steven J. Lavine. University of Florida/Jacksonville, Jacksonville, FL

P1-57  Automated Functional Imaging Speckle Tracking Imaging Methods to Assess Right Ventricular Function in Chronic Pulmonary Arterial Hypertension
Francisco R. Lopez, Jean Elwing, Angel López-Candales. University of Cincinnati College of Medicine, Cincinnati, OH

P1-58  Isovolumic Acceleration at Rest and During Exercise in Children after Heart Transplant
Barbara Cifra, Henrik Brun, Brian McCrindle, Anne Dipchand, Luc Mertens. Hospital for Sick Children, Toronto, ON, Canada

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Setu Trivedi, Angel Lopez-Candales. University of Cincinnati - College of Medicine, Cincinnati, OH
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Tetsuari Onishi, Hidekazu Tanaka, Yoshiki Yamadori, Mayumi Shigeru, Kensuke Matsumoto, Sei Fujiwara, Hiroya Kawai, Kenichi Hirata. Kobe University Graduate School of Medicine, Kobe, Japan

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Two- and Three-Dimensional Global Longitudinal Strain of Right Ventricular Free Wall Using Transthoracic Echocardiography could be an Accurate Indicator of Three-Dimensional Right Ventricular Systolic Function
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Chun-Li Wang, Yi-Hsin Chan, Chi-Tai Kuo, Yung-Hsin Yeh, Lung-Sheng Wu. Chang Gung Memorial Hospital, Linkou, Taoyuan, Taiwan

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Hong-ning Song, Rui-qiang Guo. Remin Hospital of Wuhan University, China, Wuhan City, China

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Giora Landesberg. Hadassah - Hebrew University Medical Center, Jerusalem, Israel

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Using Established and Novel Echocardiography Imaging to Quantify Right Ventricle Dimensions and Function in Newborn Infants During Early Postnatal Transition - Assessment of Feasibility, Reliability and Establishing Normative Data
Amish Jain, Adel Mohamed, Afif El-Khuffash, Robert P. Jankov, Patrick J. McNamara, Luc Mertens. 1Mount Sinai Hospital, Toronto, ON, Canada; 2The Rotunda Hospital, Dublin, Ireland; 3Hospital for Sick Children, Toronto, ON, Canada

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Rui-qiang Guo, Yi Liu. Remin Hospital of Wuhan University, China, Wuhan City, China

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Gabriel De Vela, Victoria Moore, Christine Schulte, Janaka Wansapura, Jeanne James. Cincinnati Children’s Hospital, Cincinnati, OH

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Aortic Size in Continuous Flow Left Ventricular Assist Devices: Associations with Late Changes in Aortic Insufficiency
Jeffrey E. Cohen, Arudo Hiraoka, Ted Plappert, Jessica Howard, Martin St. John Sutton, J. Eduardo Rame, Martin Keane, Y. Joseph Woo, James N. Kirkpatrick. Hospital of the University of Pennsylvania, Perelman School of Medicine, Philadelphia, PA

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Amish Jain1, Afif El-Khuffash2, Adel Mohamed3, Patrick J. McNamara3, Luc Mertens3. 1Mount Sinai Hospital, Toronto, ON, Canada; 2The Rotunda Hospital, Dublin, Ireland; 3Hospital for Sick Children, Toronto, ON, Canada

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Left Ventricular Untwisting Motion Augments Left Ventricular Diastolic Suction
Takahiro Ohara1, Hiroyuki Iwano2, Min Pu2, Brett Meyers3, Cassie Niebel4, John Charonko5, Pavlos Vlachos3, William Little2. 1National Cerebral and Cardiovascular Center, Suita, Japan; 2Wake Forest School of Medicine, Winston-Salem, NC; 3Virginia Tech, Blacksburg, VA
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Clinical Application of Three-Dimensional Ultrasound Speckle Tracking Imaging for Left Ventricular Systolic Function in Patients with Rheumatic Mild to Moderate Mitral Stenosis
Mingxing Xie, He Li. Union Hospital of Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

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Seong Hwan Kim1, Goo-Geong Cho1, Inkyung Baik1, Hong Euy Lim2, Jin Oh Na2, Seong Woo Han2, Yong Hyun Kim2, Chol Shin1. 1Korea University Ansan Hospital, Ansan, Republic of Korea; 2Seoul National University Bundang Hospital, Seongnam, Republic of Korea; 3Kookmin University, Seoul, Republic of Korea; 4Korea University Guro Hospital, Seoul, Republic of Korea; 5Hallym University Hangang Sacred Heart Hospital, Seoul, Republic of Korea

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Jason A. Talavera1, Jeff Ho1, Bryan Ristow2, Richard Shaw1, Beth E. Cohen2, Nelson B. Schiller2. 1California Pacific Medical Center, San Francisco, CA; 2University of California San Francisco, San Francisco, CA

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David R. Okada, Maria R. Molina, Esther E. Vorovich, Yuchi Han. Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

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Salutatory Association of Alcohol and Ventricular Function is Limited to Moderate Systolic Dysfunction
Haroon Yousaf1, Richard J. Rodeheffer2, Khawaja Afzal Ammar3. 1Aurora Cardiovascular Services, Aurora Sinai/St. Luke’s Medical Centers, University of Wisconsin School of Medicine & Public Health, Milwaukee, WI; 2Division of Cardiovascular Diseases, Mayo Clinic, Rochester, MN

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Rui-qiang Guo, Hong-ning Song. Remin Hospital of Wuhan University, China, Wuhan City, China

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Manish Mehta, Timothy Jacobson, Elizabeth Le, Scott Chadderdon, Dawn Peters, Sanjiv Kaul. OHSU, Knight Cardiovascular Institute, Portland, OR

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Shuji Hayashi, Hirotugu Yamada, Junko Hotchi, Susumu Nishio, Mika Bando, Yukina Hirata, Masataka Sata. Tokushima University Hospital, Tokushima, Japan
P1-89  Influence on the Right Ventricular Diastolic Function by Pulmonary Hypertension
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P1-90  Semi-automated Estimation of Ejection Fraction at the Point-of-Care Correlates with Expert Eyeballing
Christian A. Frederiksen, Peter Juhl Olsen, Johan F. Hermansen, Niels H. Andersen, Erik Sloth. Aarhus University Hospital, Aarhus, Denmark

P1-91  Detection of Right Ventricular Wall Motion Asynergy Confirmed on Four Dimensional 320 Slice CT by Two Dimensional Global Longitudinal Strain of Right Ventricle Using Transthoracic Echocardiography in Pulmonary Hypertension
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P1-92  Echocardiographic and Ambulatory B-Type Natriuretic Peptide Correlates in Patients Supported by a Left Ventricular Assist Device
Anit Mankad, Keyur Shah, Grace Merinar, Michael C. Kontos, J.V. (Ian) Nixon. Pauley Heart Center, VCU School of Medicine, Richmond, VA

P1-93  Evaluation of Global and Regional Left Ventricular Systolic Function in Patients with Coronary Stenosis with Three-Dimensional Speckle Tracking
Qing Zhou, Cai-ying Wang, Rui-qiang Guo. Remin Hospital of Wuhan University, China, Wuhan City, China

P1-94  Speckle-Tracking Echocardiography of the Left Ventricle: Important Parameter in the Setting of Ischemic Heart Disease
Jan E. J. Claessens, Sr.¹, Philip Claessens², Christophe Claessens³, Marc Claessens⁴, Maria Claessens⁵. ¹AZ Monica, Antwerp, Belgium; ²AZ Sint Jozef, Malle, Belgium; ³AZ Turnhout, Turnhout, Belgium; ⁴AZ Klin, Brasschaat, Belgium; ⁵Outpatients’ Cardiological Clinic Kloppend Hart Antwerp-Schilde-Essen, Antwerp, Belgium

P1-95  Quantification of Blood Flow Organization and Energetics in the Human Left Ventricle in Choric Heart Failure with Vector Flow Mapping
Rui-qiang Guo, Yi Liu. Remin Hospital of Wuhan University, China, Wuhan City, China

P1-96  Evaluation of Left Ventricular Dyssynchrony in Coronary Heart Disease without Visual Segmental Wall Motion Abnormalities by Strain Delay Index
Qing Zhou, Jia Huang, Rui-qiang Guo. Remin Hospital of Wuhan University, China, Wuhan City, China

P1-97  Association Between Alcohol Intake and Echocardiographic Abnormalities in the General Population
Haroon Yousaf¹, Richard J. Rodeheffer², Khawaja Afzal Ammar³. ¹Aurora Cardiovascular Services, Aurora Sinai/St. Luke’s Medical Centers, University of Wisconsin School of Medicine & Public Health, Milwaukee, WI; ²Division of Cardiovascular Diseases, Mayo Clinic, Rochester, MN

P1-98  Additional Value of Lateral Tissue Doppler Imaging in the Assessment of Diastolic Dysfunction in Subjects With Pseudonormal Pattern of Mitral Inflow and Septal Tissue Doppler Imaging
HACK-LYOUNG KIM, JAE-BIN SEO, WOO-YOUNG CHUNG, SANG-HYUN KIM, MYUNG-A KIM, JOO-HEE ZO. Boram Medical Center, Seoul, Republic of Korea

P1-99  Assessment of Early Changes of Left Ventricular Systolic Function by Ventricular Midwall Fractional Shortening in Patients with Type 2 Diabetes Mellitus
Rui-qiang Guo, Ya-qing Cui. Remin Hospital of Wuhan University, China, Wuhan City, China

P1-100  Hyperdynamic Left Ventricle on Radionuclide Myocardial Perfusion Imaging: A Marker of Diastolic Dysfunction
Saeed Ahmed, Ramakrishna Gorantla, Dhananjai Menzies. Mary Imogene Bassett Hospital, Cooperstown, NY

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Ultrasound Stimulates Synthesis of Cardiac Endothelial Cell Vasodilators In Vitro
Azzdine Y. Ammi, Cathrine M. Davis, Brian Mott, Nabil J. Alkayed, Sanjiv Kaul. Oregon Health & Science University, Portland, OR
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Improvement in Microvascular Outcome Using Both Image Guided Therapeutic Ultrasound Impulses with a Long Pulse Duration and High Mechanical Index During An Intravascular Microbubble Infusion in Acute Myocardial Infarction
Juefei Wu, Feng Xie, John LoF, Elizabeth Stolze, Gretchen Fry, Lucas Drvol, Thomas R. Porter. University of Nebraska Medical Center, Omaha, NE
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Comparison Between Coronary Flow Reserve Obtained by Doppler and Myocardial Blood Flow Reserve Obtained by Myocardial Contrast Echocardiography in Patients with Dilated Cardiomyopathy
Marta Lima, Wilson Mathias, Jr., João Sbano, Márcio Lima, Edimar Bocchi, Jeane M. Tsutsui. Heart Institute (InCor), University of São Paulo Medical School, São Paulo, Brazil

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Shelby Kutty, Juefei Wu, James Hammel, Joseph Abraham, Ibrahim Abdullah, John Lof, Stanley Radio, Feng Xie, David Danford, Thomas Porter. University of Nebraska/Creighton University, Omaha, NE

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Contrast Echocardiography for Monitoring Cardiotoxic Effects of Chemotherapy: Quality Control in Clinical Practice with Sonographer Administered Contrast
Weimin He1, Eric Leung2, Sean Chiew1, Edith Pituskin3, Ian Paterson1, Jonathan Choy1, Harald Becher1. 1Mazankowski Heart Institute, University of Alberta Hospital, Edmonton, AB, Canada; 2School of Medicine, University of Alberta, Edmonton, AB, Canada; 3Cross Cancer Institute, Edmonton, AB, Canada

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Discrepancies in Measures of Left Ventricular Size by Diameter and Volume with Contrast Echocardiography
Patrick H. Gibson, Harald Becher, Jonathan Choy. Mazankowski Alberta Heart Institute, Edmonton, AB, Canada
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Ambrose Panico, Anoop Agrawal, Atif Bashir, Robert Nierwzicki, Thiveni Sanagala, Mushabbar Syed, Khaled Dajani. Loyola University Medical Center, Chicago, IL

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Contrast-Enhanced Ultrasound Imaging of Intraplaque Neovascularization in Carotid Arteries: Correlation with Biomarker
Woo-Shik Kim, Hyun Soo Kim, Weon Kim, Kwon Sam Kim, Jong Hoa Bae. Kyung Hee University, Seoul, Republic of Korea

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Sahar S. Abdelmoneim, Sue J. Eifert Rain, Gajanan Bhat, Pamela Hsu, Mary E. Hagen, Dalene Bott-Kitslaar, Ramon Castello, Susan Wilansky, Patricia A. Pellikka, Sharon L. Mulvagh. Mayo Clinic, Rochester, MN
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Effects of Insulin Resistance on Myocardial Blood Flow and Arterial Peripheral Circulation in Patients with Polycystic Ovary Syndrome
Alessandra Ribeiro1, Alessandro Scapinelli1, Ingrid Kowatch2, Sonia Tamanaha1, Jean M. Tsutsui3, Wilson Mathias, Jr.; Jose Aldrighi1. 1Department of Obstetrics and Gynecology, Faculdade de Ciências Médicas da Santa Casa, São Paulo, Brazil; 2Heart Institute (InCor), University of Sao Paulo Medical School, São Paulo, Brazil; 3Fleury Group, São Paulo, Brazil

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David Platts1, James Cafaro2, Andrew Maurice1, Kimble Dunster1, Sara Diab1, John Fraser1, Kiran Shekar1, Darryl Burstow1, Daniel Mullany1, Jonathan Chan1. 1The Prince Charles Hospital, Brisbane, Australia; 2Bond University, Robina, Australia

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Jang-Won Son1, Chi Young Shim2, Hyuk-Jae Chang2, Jong-Won Ha2, Namsik Chung2, Helene Houle1, Mani A. Vannan2, Geu-Ru Hong2. 1Division of Cardiology, Yeungnam University Medical Center, Daegu, Republic of Korea; 2Division of Cardiology, Severance Cardiovascular Hospital, Yonsei University Health System, Seoul, Republic of Korea; 3Siemens Medical Solution, Mountain View, CA; 4Piedmont Heart Institute Department of Cardiovascular Imaging, Atlanta, GA

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David Platts, Beatrice Z. Sim, Matthew J. Tunbridge, Sara Diab, Kimble Dunster, Kiran Shekar, Darryl Burstow, Marc Maybauer, John Chan, John Fraser. The Prince Charles Hospital, Brisbane, Australia
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2D Speckle Tracking Echocardiography for the Early Detection of Cardiotoxicity among Adult Survivors of Childhood and Young Adult Cancer

Anthony F. Yu¹, Jayant Raikhelkar², Emily C. Zabor², Chaya S. Moskowitz², Kevin C. Oeffinger³, Emily S. Tonorezos³, Roberto Adsuar³, Ray Diaz³, Elton Mara³, Richard M. Steingart³, Jennifer E. Liu³. ¹Mount Sinai Medical Center, New York, NY; ²Memorial Sloan Kettering Cancer Center, New York, NY

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Pre Transplant Diastolic Dysfunction is a Predictor of Post Hematopoietic Stem Cell Transplant Systolic Heart Failure and Mortality

Aditi Singhvi, Kiran Garikapati, Dania Khoulani, Waqas Qureshi, Syed Hassan, Sophia Qureshi. Henry Ford Hospital, Detroit, MI

**P1-131** *Obesity, Physical Activity, and Changes in Cardiac Geometry and Function in Adolescents and Young Adults - the Heart Study*

Sunny Jhamnani¹, Ana Barac¹, Hong Wang¹, Nawar Shara², Mary Roman³, Richard Devereux⁴, Barbara Howard⁴. ¹Georgetown University Hospital/Washington Hospital Center, Washington, DC; ²MedStar Health Research Institute, Hyattsville, MD; ³Weill Cornell Medical College/NewYork-Presbyterian Hospital, New York City, NY

**P1-132** *Effects of Nebivolol on Exercise Tolerance and Left Ventricular Systolic and Diastolic Function*

Denise Janosik, John Nash, H. Nicole Elmore, Claire Donato, James Stokes. Mercy Heart and Vascular, St. Louis, MO

**P1-133** *Diastolic Dysfunction is Associated with Death or Heart Transplant in Patients Undergoing Cardiac Resynchronization Therapy within 2 Years of Implantation*

Rachel-Maria Brown, Nicholas Furiasse, Andrew E. Kott, Liviu Klein, Jyothy Puthumana. Northwestern University, Chicago, IL

**P1-134** *Left Ventricular Responses to Three Different Cardiotoxic Regimens in Cancer Patients and the Effect of Beta-Blocker Therapy*

Tomoko Negishi¹, Kazuaki Negishi¹, Juan Carlos Plana³, Brian A. Haluska², Thomas H. Marwick³. ¹Cleveland Clinic, Cleveland, OH; ²University of Queensland, Brisbane, Australia; ³Menzies Research Institute Tasmania, Hobart, Australia

**P1-135** *Left Ventricular Diastolic Dysfunction as Potential Mediator of Functional Abnormalities in Obese Patients with Chronic Pulmonary Arterial Hypertension*

Francisco R. Lopez, Jean Elwing, Angel López-Candales. University of Cincinnati College of Medicine, Cincinnati, OH

**P1-136** *Cardioprotective Effects of Seapolynol (Polyphenol Purified from Ecklonia cava) Against Adriamycin-Induced Cardiomyopathy in an Animal Rat Model*

Hui Kyoung Jeon¹, Dong Hyeon Lee¹, Ho Joong Youn¹, Hyeon Cheol Shin¹. ¹Uijeongbu St. Mary’s Hospital, The Catholic University of Korea, Uijeongbu, Republic of Korea; ²St. Mary’s Hospital, The Catholic University of Korea, Seoul, Republic of Korea; ³Botamedi, Seattle, WA

**P1-137** *Left Heart Chamber Quantification in Obese Patients: Do ASE Guidelines Apply?*

Pu Zong¹, Jessica Pena¹, Cynthia Taub¹. ¹James J. Peters VA Medical Center, Bronx, NY; ²Montefiore Medical Center, Bronx, NY

**P1-138** *Use of Myocardial Imaging to Select Treatment and Characterize Response in LV Dysfunction*

Leah M. Wright¹, Wojciech Kosmala², Christine Jellis³, James Shamarìn, Philip Mottram⁴, Thomas H. Marwick¹. ¹Menzies Research Institute Tasmania, Hobart, Australia; ²Wroclaw Medical University, Wroclaw, Poland; ³University of Queensland, Brisbane, Australia; ⁴Monash University, Melbourne, Australia

**P1-139** *Global and Segmental Strain for Detection of Scar and Inflammation in Cardiac Sarcoidosis*

Kazuaki Negishi¹, Tomoko Negishi¹, Zoran B. Popovic¹, Richard C. Brunken¹, Thomas H. Marwick¹, Balaji K. Tamarappo¹. ¹Cleveland Clinic, Cleveland, OH; ²Menzies Research Institute Tasmania, Hobart, Australia

**P1-140** *Echocardiographic Abnormalities in Long-Term Adult Survivors of Childhood, Adolescent and Young Adult Cancer*

Nandini Yadav, Jayant Raikhelkar, Emily Zabor, Chaya Moskowitz, Kevin Oeffinger, Roberto Adsuar, Emily Tonorezos, Richard Steingart, Jennifer Liu. Memorial Sloan Kettering Cancer Center, New York, NY

**P1-141** *Carotid Artery Ultrasound or CT Calcium Scoring: How Best to Identify Women with Subclinical Atherosclerosis?*

Ranjini Raina Roy, R. Todd Hurst, Steven J. Lester, Christopher Kendall, Christy Baxter, Qing Wu, Jill Borovansky, Julia Files, Prasad Panse, Susan Wilansky. Mayo Clinic Arizona, Scottsdale, AZ
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Qiong Zhao, Laura A. Colangelo, Kameswari Maganti, Kiang Liu. Northwestern University, Chicago, IL

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Jeoung-sook Shin, Joon-han Shin, Jin-sun Park, Seung-Jea Tahk, Gyo-seung Hwang, Myeong-Ho Yoon, So-Yeon Choi, Byoung-Joo Choi, Hong-Seok Lim, Hyong-Mo Yang, Gyu-Tae Shin, Heung-Soo Kim, Inhee Park, Kyong-Woo Seo, Yong-Woo Choi. Ajou University School of Medicine, Suwon, Republic of Korea

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Can Early Changes in 2-Dimensional Speckle Tracking Echocardiography Predict a Future Decrease in Left Ventricular Ejection Fraction in Lymphoma Patients Undergoing Anthracycline Chemotherapy?
Yali Xu1, Hermann Joerg2, Patricia A Pelliika2, Stephen M Ansell2, Steven Cha2, Hector R Villarraga2. 1Division of Cardiovascular Diseases, Echocardiography and Hemodynamic Laboratory, Mayo Clinic, Rochester, MN, and Xingqiao Hospital, The Third Military Medical University, Chongqing, China; 2Division of Cardiovascular Diseases, Echocardiography and Hemodynamics Laboratory, Mayo Clinic, Rochester, MN

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Subtle Impairment of Right Ventricular Function in Systemic Sclerosis with Lung Fibrosis Detected by Tissue Doppler
Maria E. Otto1, Maria E. Otto1, Francisco R. Lopez1, Jean Elwing1, Angel López-Candales1. University of Cincinnati College of Medicine, Cincinnati, OH

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Left Atrial Volume Index as an Independent Predictor of Exercise Capacity
Phan B. Tran1, Nithima Ratanasit1, Sirakun Chirakarnjanakorn2, Decho Jakapanichakul1, Rungrig Krittayaphong1. Siriraj Hospital, Mahidol University, Bangkok, Thailand

P1-147
Right Ventricular Systolic Function was Impaired in Patients with Chronic Renal Failure
Minmin Sun1, Yu Kang1, Cuizhen Pan1, Bo Sheng1, Xianhong Shu1. Zhongshan Hospital, Fudan University, Shanghai, China

P1-148
Incidence of Left Ventricular Diastolic Dysfunction in Chronic Pulmonary Arterial Hypertension Patients: A Single Center Echocardiographic Study
Francisco R. Lopez1, Jean Elwing1, Angel López-Candales1. University of Cincinnati College of Medicine, Cincinnati, OH

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High Admission E/e’ Is Independently Associated with Higher 30-day Congestive Heart Failure Readmission Rate
Sherry Megalla1, Manoj Bhandari1, Justin Karl1, Harish Patel1, Usman Khan1, Ahmed Elwan1, Yassar Nabeel1, Marin Nicu1, Narendra Bhalodkar1, Jonathan N. Bella1. Bronx Lebanon Hospital Center, Bronx, NY

P1-150
The Importance of Echocardiographic Dyssynchrony to Patients with Insulin-Dependent Diabetes Mellitus Undergoing Cardiac Resynchronization Therapy
Mohamed Ahmed2, Josef Marek1, Keiko Ryo1, Kristina Haugaa2, David Schwartzman3, John Gorcsan4, III. University of Pittsburgh, Pittsburgh, PA

P1-151
Automated Parametric Display for Rapid Assessment of Changes in Left Ventricular Ejection Fraction and Global Longitudinal Strain During Serial Echocardiographic Studies
Gillian Murtagh1, Wendy Tsang1, Nicole M. Bhave1, Brent DeMayo1, Eric Kruse1, Megan Yamat1, Roberto M. Lang1, Jeanne M. DeCara1. University of Chicago Medical Center, Chicago, IL

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Does Chagasic Etiology Counts for Decreased Exercise Capacity in Heart Failure? A Comparison of Echocardiographic Variables
Maria E. Otto1, Alexandre C. L. Sanchez1, Adenalva L. S. Beck1, Marianne L. Silva2, Gerson C. Junior2, 1Instituto de Cardiologia do Distrito Federal (ICDF), Brasilia, Brazil; 2Universidade de Brasilia (UnB), Brasilia, Brazil

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Epicardial Adipose Tissue: Predictor of Metabolic Syndrome in the Elderly
Michael Wu1, Yue Yu2, Suraj Sookhu1, John N. Makaryus3, Farhan Bajwa4, Ahammad Suparwala5, Farooq A. Chaudhry5, Amgad N. Makaryus1, Valentin Suma1. 1Hofstra North Shore LIJ Health System, Manhasset, NY; 2St. Luke’s-Roosevelt Hospital Center, New York, NY

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Myocardial Performance in Breast Cancer Survivors Athletes
Laura Stefani1, Ilaria Corsani1, Jr., Valentina Di Tante1, Jr., Gabriele Innocenti, Jr., Giorgio Galanti, Sr., Ilaria Corsani, Jr., Valentina Di Tante, Jr., Laura Stefani, Sr., Ilaria Corsani, Jr., Gabriele Innocenti, Jr., Giorgio Galanti, Sr. Sports Medicine System, Manhasset, NY

P1-155
Impact of Acute Septal Angle on Prediction of Post-induction Hypotension During General Anesthesia
Satoru Fujii1, Mika Mori2, Tsuyoshi Yoshimuta2, Tsunehisa Tsubokawa2, Masakazu Yamagishi2, Ken Yamamoto1. 1Kanazawa University Hospital, Kanazawa, Japan; 2Division of Cardiovascular Medicine, Kanazawa University, Kanazawa, Japan; 3Department of Aesthesiology, Kanazawa University Hospital, Kanazawa, Japan
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P1-156  Moderated Poster
Prediction of 30-Day Heart Failure-Specific Readmission Risk by Echocardiographic Parameters
Paaladinesh Thavendiranathan1, Teerapat Yingchoncharoen2, Andrew Grant3, Sinziana Seicean4, Steven H. Landers5, Eiran Z. Gorodeski2, Thomas H. Marwick2. 1University of Toronto, Toronto, ON, Canada; 2Cleveland Clinic, Cleveland, OH; 3University of Calgary, Calgary, AB, Canada; 4Visiting Nurses Association Health Group, Red Bank, NJ; 5Menzies Institute of Australia, Tasmania, Australia

P1-157  Moderated Poster
Echocardiographic Characterization of Right Atrial Volumes Compared with Cardiac Magnetic Resonance Imaging
Santanu Biswas, Mark Rabbat, Thriveni Sanagala, David Wilber, David Wilber. Loyola University Medical Center, Heart and Vascular Institute, Maywood, IL

P1-158
Echocardiographic Predictors of Adverse Outcomes in Patients with Acute Decompensated Heart Failure - The Importance of Impaired Diastolic Function in a Prospective Cohort Study
Joao L. Cavalcante1, Mohammed Abu-Mafouz2, Kamran Shaikh3, Karthik Ananthasubramaniam4. 1University of Pittsburgh, Pittsburgh, PA; 2Henry Ford Hospital, Detroit, MI; 3Seton Healthcare Family Hospitals, Kyle, TX

P1-159
Educational Intervention to Reduce Inappropriate Transthoracic Echocardiograms: The Need for Sustained Intervention
Sacha R. Bhatia, Creagh E. Milford, Michael H. Picard, Rory B. Weiner. Massachusetts General Hospital, Boston, MA

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Predictive Value of Diastolic Function Parameters After Catheter Ablation in Patients with Persistent and Longstanding Persistent Atrial Fibrillation
Maria Kohari, Erica Zado, Francis E. Marchlinski, David J. Callans, Yuchi Han. Hospital of the University of Pennsylvania, Philadelphia, PA

P1-161
General Internist Performed Bedside Cardiac Ultrasound Assessment of Left Ventricular Function Agrees Strongly with Cardiologist Echocardiography
Benjamin K. Johnson1, David M. Tierney1, Terry K. Rosborough1, Kevin M. Harris2, Mark C. Newell2. 1Abbott Northwestern Hospital, Minneapolis, MN; 2Minneapolis Heart Institute, Minneapolis, MN

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Predictors of Repeat Cardiovascular Testing within 18 Months in Patients who Receive an Index Stress Echocardiography
Theresa Zavodnik1, Thomas Marwick2, Rory Hachamovitch1, Brian P. Griffin1. 1Cleveland Clinic, Cleveland, OH; 2Menzies Institute of Australia, Tasmania, Australia

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Echocardiographic Predictors of Mortality and Acute Graft Rejection in Liver Transplant Patients
Kiran Garikapati, Chetan Mittal, Syed Hassan, Hassan Raza, Sophia Qureshi, Aishwarya Kuchipudi, Waqas Qureshi. Henry Ford Hospital, Detroit, MI

P1-164
Effects of Standardization Training on Inter-institutional Performance of Left Ventricular Volumes Using Three-Dimensional Echocardiography
Wendy Tsang1, Cliona Kenny2, Shaumik Adhya2, Stam Kapentanakis3, Lynn Weinert1, Mark Monaghan2, Roberto M. Lang2. 1University of Chicago Medical Center, Chicago, IL; 2King’s College Hospital, London, United Kingdom

P1-165
Pre Transplant Pulmonary Hypertension does not have Adverse Effects on Patient or Graft Survival Following Kidney Transplantation: Implications for Patient Selection
Vanji Karthikeyan, Rishi Patel, Alok Dave, Meredith Mahan, Anita Patel, Mariella Goggins, Karthik Ananthasubramaniam. Henry Ford Hospital, Detroit, MI

P1-166
Cardiac Dyssynchrony by Tissue Doppler Free Wall Activation Delay is Predictive of Clinical Outcomes after Cardiac Resynchronization Therapy in Patients with Chronic Kidney Disease
Mohamed Ahmed, Josef Marek, Keiko Ryo, Kristina Haugaa, David Schwartzman, John Gorcsan, III. University of Pittsburgh, Pittsburgh, PA

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Utility Cardiac Stroke Score in a Prospective Study of Patients with Ischemic Stroke
Rachel-Maria Brown, Shyam Prabhakaran, Carlos Corado, Kameswari Maganti. Northwestern University, Chicago, IL

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Publication Trends in Noninvasive Cardiovascular Imaging over the Last Twenty Years
Sobia Mujtaba1, Mohan Pamerla1, Cynthia C. Taub2, Jessica M. Pena3. 1Jacobi Medical Center / Albert Einstein College of Medicine, Bronx, NY; 2Jack D. Weiler Hospital of the Albert Einstein College of Medicine, Bronx, NY
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Diagnosis Capability of Comprehensive Handheld versus Transthoracic Echocardiography
Michael W. Cullen, Christopher G. Scott, Lori A. Blauwet, Ori M. Vatury, Sharon L. Mulvagh, Thomas R. Behrenbeck, Patricia A. Pellikka. Mayo Clinic, Rochester, MN
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Appropriate Use of Echocardiography in Hospitalized Patients with Syncope and Its Impact on Downstream Resource Utilization
Ali Shafiq, Hardik Bhansali, Derar Albashaireh, Ra’ad Tashman, Meredith Mahan, Karthikeyan Ananthasubramaniam. Henry Ford Hospital, Detroit, MI

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Improvements in Care Process and Patient Satisfaction with a Standardized Transesophageal Echocardiography Guided Direct Current Cardioversion Protocol
Brandon R. Porten1, Craig E. Strauss2, Kevin M. Harris3, Ross F. Garberich1, William T. Katsiyiannis1, Robert E. McKlveen2, David G. Hurrell3. 1Minneapolis Heart Institute Foundation at Abbott Northwestern Hospital, Minneapolis, MN; 2Northwest Anesthesia, PA, Minneapolis, MN

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Evaluation of Transthoracic Echocardiography Simulator Proficiency by Kinematic Motion Analysis
Han Kim1, Feroze Mahmood2, Remco Bergman3, David O’Halloran1, Katie Hawthorne2, John Mitchell2, Robina Matyal1. 1St. Michael's Hospital, Toronto, ON, Canada; 2Beth Israel Deaconess Medical Center, Boston, MA; 3University Medical Center Groningen, Groningen, Netherlands

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A Quality Initiative to Increase Consistency of Assessment and Reporting of Pericardial Effusions and Cardiac Tamponade Physiology: A Single Center Study
John R. Schairer, Santanu Biswas, Mouhamad Mansour, John J. Frank, Clinton A. Brawner, Steven J. Keteyian, Karthik Ananthasubramaniam. Henry Ford Heart and Vascular Institute, Detroit, MI

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Implementing a Continuous Quality Improvement Program in a High Volume Echocardiography Laboratory
Stephanie Minter, Amanda Tinnemore, Alicia Armour, Brenda Sedberry, Karen Strub, Zainab Samad, Eric J. Velazquez. Duke University Medical Center, Durham, NC
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Left Atrial Remodeling and Recurrence of Congestive Heart Failure
Kazuto Yamaguchi, Hiroyuki Yoshitomi, Nobuhide Watanabe, Hirotomo Sato, Tomoko Adachi, Sakiko Ita, Takashi Sugamori, Nobuyuki Takahashi, Akihiro Endo, Kazuaki Tanabe. Shimane University Faculty of Medicine, Izumo, Japan

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Can Internal Medicine Residents be Trained to Integrate Hand-Held Cardiac Ultrasound into the Assessment of Cardiac Patients in the Emergency Department?
William F. McIntyre, Julie A. Gilmour, Adrian Baranchuk, Wilma M. Hopman, Curtis Nickel, Thomas Cawthorn, Amer M. Johri. Queen’s University, Kingston, ON, Canada

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Results of a 30 Days Training of Cardiology Residents to Perform Focused Cardiac Ultrasound Examination with Hand-Carried Cardiac Ultrasound Device
Vincente N. Siqueira, Frederico J. N. Mancuso, Orlando Campos, Antonio C. C. Carvalho, Angelo V. A. De Paola, Valdir A. Moises. Federal University of Sao Paulo, Sao Paulo, Brazil

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Past and Future Systolic Dysfunction is Common in Patients Diagnosed with Heart Failure and Preserved Ejection Fraction
Neeraja Yedlapati1, Mussie Gebremedih2, Mario J. Garcia3, Ileana Pena4, Daniel M. Specvak1. 1Montefiore Medical Center, Bronx, NY; 2Jacobi Medical Center, Bronx, NY

P1-179
Repeat Echocardiograms in Patients Presenting with Acutely Decompensated Heart Failure in the Setting of Dietary or Medicine Noncompliance: Is There a Role?
Michael Goyfman, Smadar Kort. Stony Brook University Medical Center, Stony Brook, NY

P1-180
Quality Control in the Echo Lab: Can a Teaching Intervention Reduce Inter-observer Variability in the Assessment of Pulmonary Hypertension?
Daniel Patton1, Atoosa Enzevaee2, Judy Hung3, Andrew Day1, Colleen Londry1, Anthony Sanfilippo2, Christine D’Arsigny2, Amer M. Johri1. 1Queen’s University, Kingston, ON, Canada; 2Harvard University, Boston, MA

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Association of Left Ventricular Circumferential Myocardial Relaxation with Long-Term Outcome in Patients with Pulmonary Hypertension
Yoshiaki Motoji, Hidekazu Tanaka, Yuko Fukuda, Keiko Ryo, Takuma Sawa, Yoshiki Yamadori, Junichi Imanishi, Tatsuya Mioyoshi, Yasuhide Mochizuki, Mana Hiraishi, Akihiro Kaneko, Kazuhiro Tatsumi, Tetsuari Onishi, Kensuke Matsumoto, Noriaki Emoto, Hiroya Kawai, Ken-ichi Hirata. Division of Cardiovascular Medicine, Department of Internal Medicine, Kobe University Graduate School of Medicine, Kobe, Japan

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Use of a Prototype Rule Generator in Real-Time to Identify Potential Errors in Facilitated Echocardiographic Reporting
Kirk T. Spencer1, Bob Arling2, Jeanne DeCara1, Roberto M. Lang1, R. Parker Ward1, Anne M. O’Connor1, Amit R. Patel1. 1University of Chicago, Chicago, IL; 2Philips Healthcare, Andover, MA
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**P1-183**
Right Atrial Volume Index as Prognostic Parameter in Patients with Pulmonary Hypertension
Yuko Fukuda, Hidekazu Tanaka, Yoshiki Motoji, Keiko Ryo, Takuma Sawa, Yoshiki Yamadori, Junichi Imanishi, Tatsuya Miyoshi, Yasuhide Mochizuki, Mana Hiraishi, Akihiro Kaneko, Kazuhiro Tatsumi, Tetsuari Onishi, Kensisuke Matsumoto, Noriaki Emoto, Hiroya Kawai, Ken-ichi Hirata. Kobe University Graduate School of Medicine, Kobe, Japan

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Left Atrial Diameter Should Not be Reported
Brian Volz, Felicia Rinaldi, Rachel J. M. Chung, Serena Dugan, David Collins, Eugene S. Chung. The Christ Hospital, Cincinnati, OH

**P1-185**
Semi-automated Detection and Quantification of Aortic Atheromas from Three-Dimensional Transesophageal Echocardiography
Wendy Tsang1, Concetta Piazzese2, Miguel Sotauquira2, Itzhak Kronzon2, Enrico Caiani3, Roberto M. Lang1. 1University of Chicago Medical Center, Chicago, IL; 2Politecnico di Milano, Dipartimento di Elettronica, Informazione e Bioingegneria, Milan, Italy; 3Lenox Hill Heart and Vascular Institute of New York, New York, NY

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Correlation of Enhanced Intensity of Atherosclerotic Plaque at Contrast-enhanced Ultrasonography with Histological Findings in an Experimental Model of Atherosclerosis
Jie Sun, You-Bin Deng, Kun Liu, Qiao-Ying Tang, Wei Zhang, Ling-Dan Guo. Tongji Hospital, Wuhan, China

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Investigation of the Mechanical Properties of Carotid Plaques Using Speckle Tracking
Ekaterina N. Borskaya1, Sergey A. Voynov2, Oleg B. Kerbikov2, Nataliya Yaroshchuk3, Tamara V. Krutova2, Maria A. Agakina1, Elena B. Shakhnovich1, Alexey G. Kuzmichev1, Alexander V. Averyanov1. 1Federal State Clinical Hospital #86, Moscow, Russian Federation; 2Federal Research Clinical Center FMBA of Russia, Moscow, Russian Federation; 3City Hospital #3, Kamensk-Uralsky, Russian Federation; 4A V Vishnevsky Institute of Surgery, Moscow, Russian Federation

**P1-188**
Novel Imaging Biomarkers: Carotid Artery Plaque Quantification by Two-Dimensional Ultrasound to Rule Out Significant Coronary Artery Disease
Mohammad N. Haqqi1, Pearl Behl1, Andrew Day1, Paul Malik1, Murray F. Matangi1, Connette Falkson2, Amer M. Johri1. 1Queen’s University, Kingston, ON, Canada; 2Kingston Heart Clinic, Kingston, ON, Canada

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A Unified Protocol for Analysis of the Aorta Results in High Reproducibility of Measurements Across Imaging Modalities: The GenTAC registry
Federico M. Asch1, Wm Guy Weigold1, Gaby Weissman1, Emad Tantawy2, Sameer Desale3, William Ravekes3, Kathryn W. Holmes3, Richard B. Devereux3, Mary J. Roman3, Jonathan W. Weinsaft4, Todd Seto5, Kim A. Eagle3, Barbara J. Kroner6, Neil J. Weissman1. 1Medstar Health Research Institute at Washington Hospital Center, Washington, DC; 2Medstar Health Research Institute, Washington, DC; 3Johns Hopkins University School of Medicine, Baltimore, MD; 4Oregon Health & Science University, Portland, OR; 5Weill Cornell Medical College, New York City, NY; 6Queens Medical Center, Honolulu, HI; 7University of Michigan, Ann Arbor, MI; 8RTI, Rockville, MD

**P1-190**
Elastic Properties of the Descending Aorta in Patients with Bicuspid or Tricuspid Aortic Valve and Aortic Valvular Disease
Maria J. Eriksson1, Johan Petriini2, Jonas Jenner1, Anette Rickenlund1, Per Eriksson2, Anders Franco-Cereceda1, Kenneth Caidahl1. 1Karolinska University Hospital, Karolinska Institute, Stockholm, Sweden; 2Karolinska Institute, Stockholm, Sweden

**P1-191**
Severity of Tricuspid Valve Regurgitation and Right Atrial Volume Predicts Poor Outcome in Pulmonary Arterial Hypertension

**P1-192**
Prevalence and Factors Associated with Left Ventricular Remodeling in Renal Artery Stenosis
Abdur R. Khan, Mujeeb Sheikh, Christopher Cooper, Samer Khouri. Division of Cardiovascular Medicine, Department of Internal Medicine, University of Toledo Medical Center, Toledo, OH

**P1-193**
Can the Combination of Plasma- and Imaging- Biomarkers Enhance the Evaluation of Atherosclerosis?
Amer M. Johri, Daniel D. Anselm, M. Yat Tse, David W. J. Armstrong, Nicole M. Ventura, Andrew Day, Stephen C. Pang. Queen’s University, Kingston, ON, Canada

**P1-194**
Evaluation of Carotid Arterial Circumferential Strain in Health Subjects by Two-dimensional Speckle Tracking Imaging
Mingxing Xie, Yao Deng. Union Hospital of Tongji Medical College, Huazhong University of Science and Technology, Wuhan, Christmas Island
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Comparison of Speckle Tracking Echocardiography and Magnetic Resonance Feature Tracking Derived Longitudinal Strain for Differentiating Constrictive Pericarditis from Restrictive Cardiomyopathy
Makoto Amaki, John Savino, Javier Sanz, Gianni Pedrizzetti, Jagat Narula, Partho P. Sengupta. Mount Sinai Hospital, New York, NY

P1-196
Septal Perforator Anatomy and Variability of Perfusion Bed by Myocardial Contrast Echocardiography in Hypertrophic Cardiomyopathy Patients Undergoing Alcohol Septal Ablation
Eric L. Wallace, J. Jenkins Thompson, Michael W. Faulkner, John C. Gurley, Mikel D. Smith. University of Kentucky, Lexington, KY

P1-197
Global Longitudinal and Circumferential Strain to Quantify Left Ventricular Function in Peripartum Cardiomyopathy
Josef J. Marek¹, Dennis McNamara¹, Mohamed Ahmed¹, Lori A. Blauwet¹, Leslie T. Cooper², John Gorcsan, III¹. ¹University of Pittsburgh, Pittsburgh, PA; ²Mayo Clinic, Rochester, MN
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Blood in the Pericardium: Successful Non-operative Management for the Majority with an Echo-based Pericardiocentesis Practice

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Left Ventricular Noncompaction: How Frequently Does It Occur?
Kalpesh Patel, David Cotoni, J.V. (Ian) Nixon. Pauley Heart Center, VCU School of Medicine, Richmond, VA

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Relationship Between Echocardiographic Indexes of Cardiac Function and Autonomic Dysfunction in Different Forms of Chagas' Disease
João Marcos Bemfica Barbosa-Ferreira, Fábio Fernandes, Vera Maria Cury Salemi, Felix José Alvarez Ramos, Barbara Maria Ianni, Cesar José Grupi, Denise Tessariol Hachul, Edmundo Arteaga, Luciano Nastari, Charles Mady. Heart Institute (InCor), University of São Paulo Medical School, São Paulo, Brazil
P2-01  Moderated Poster
Assessment of Cardiac Structure and Function by Three-dimensional Echocardiography in Healthy Pregnant Women
Ming-Sum Lee, Meena Narayanan, Salima Qamruddin, Reza Rafie, Alyssa Bamba, Alice Stek, Mohammad Ghaliichi, Samuel Daneshvar, Nidhi Theraja, Larisa Yedigarova, Uri Elkayam, Tasneem Z. Naqvi. Keck School of Medicine, Los Angeles, CA
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P2-02  Moderated Poster
Assessment of Left Atrial Volume Using Real-time 3-dimensional Echocardiography in Healthy Children
Noboru Tanaka1, Kiyohiro Takigiku2, Ken Takahashi1, Ayako Kuraoka3, Kotoko Matsui3, Satoru Iwashima4, Manatomo Toyono4, Satoshi Yasukouchi4, Mshahiko Kishiro4, Toshiaki Shimizu1, Toshiaki Shimizu1, Ken Takahashi1, Ayako Kuraoka3, Kotoko Matsui3, Satoru Iwashima4, Manatomo Toyono4, Satoshi Yasukouchi4, Mshahiko Kishiro4, Toshiaki Shimizu1
Author Disclosure Key: 1) Speakers’ Bureau; 2) Consultant/Advisor; 3) Stock Ownership (not including stocks owned in a managed portfolio); 4) Research Grant (primary investigator); 5) Employment Affiliation; 6) Royalty/Patents.

P2-03  Moderated Poster
Apical Rotation Assessed by Three-Dimensional Speckle Tracking Imaging in Patients with Severe Aortic Stenosis
Kazuaki Yamaguchi, Saki Ito, Hiroyuki Yoshitomi, Tomoko Adachi, Shuai Liang, Nobuhide Watanabe, Hirotomo Sato, Takashi Sugamori, Akireno Endo, Nobuyuki Takahashi, Kuzuki Tanabe. Shimane University Faculty of Medicine, Izumo, Japan

P2-04  Moderated Poster
Assessment of Left Atrial Function in the Patients after Surgical Repair of Total Anomalous of Pulmonary Vein Connection Using Real-time 3-dimensional Echocardiography
Ayako Kuraoka1, Kiyohiro Takigiku2, Satoshi Yasukouchi2, Seiichi Tazawa2, Mori Hiromitsu2, Youhei Akazawa2, Yutaka Odanaka2, Takehiko Oonoki2, Fukushina Youseuke2, Akira Hachiyasi1, Kyushu Kosei Enkin Hospital, Kitakyushu City, Fukuoka, Japan; 2Nagano Children’s Hospital, Azumino City, Nagano, Japan

P2-05  Moderated Poster
3D Echocardiography in a Dynamic Heart Phantom: Challenging the Automatic Contour Finding Algorithm in an Abnormally Shaped Ventricle
Peter W. Wood, Harald Becher. Mazankowski Alberta Heart Institute, Edmonton, AB, Canada

P2-06  Moderated Poster
Relationship Between the Location of Implantable Device Leads and Severity of Tricuspid Regurgitation: Value of 3D Echocardiography
Anuj Mediratta, Karima Addetia, Megan Yamat, Lynn Weinert, Victor Mor-Avi, Roberto M. Lang. University of Chicago, Chicago, IL

P2-07  Moderated Poster
The Usefulness of Left Atrial Longitudinal Myocardial Dysfunction Segmentally Evaluated by Three-Dimensional Speckle Tracking Echocardiography for Identification of Paroxysmal Atrial Fibrillation
Tori Ariyoshi1, Yasuaki Wada2, Shichinhi Okuda3, Yoshio Nose3, Kosuke Uchida4, Wakako Murakami4, Noriko Harada5, Hiroko Tsutsumi5, Masafumi Yano5. 1Ultrasound Examination Center, Yamaguchi University Hospital, Ube city, Yamaguchi prefecture, Japan; 2Ultrasound Examination Center, Yamaguchi University Hospital, Ube city, Yamaguchi prefecture, Japan; 3Department of Medicine and Clinical Science, Yamaguchi University Graduate School of Medicine, Ube City, Yamaguchi Prefecture, Japan

P2-08  Moderated Poster
A New Heart Phantom Model for Validation and Standardization of Current and Future Myocardial Function Quantification Echo Tools
Loïc Hilpert1, François Tournoux2, Julien Wain-Hobson1, Arnaud Pellissier1, Fabien Labombarda1, Pascal Allain2, Mathieu De Craene3, Eric Saloux4. 1Caen University Hospital, Caen, France; 2Montreal University Hospital, Montreal, QC, Canada; 3Philips Research Paris, Paris, France

P2-09  Moderated Poster
Determination of Normal Values and Gender Related Changes in 3Dimensional Left Ventricular Longitudinal Strain by Speckle Tracking in a Healthy Pediatric Cohort
Shawn D. Cupp, Ivan Wilmot, Thieu P. Nguyen, Grace Freire, Adam Verigan, Jenny L. Leshko, Kathryn Nardell, Gul H. Dadlani. All Children’s Hospital, Largo, FL
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Relationship Between Left Atrial Appendage Morphology and Function, and CHADS2 Scores in Patients with Nonvalvular Atrial Fibrillation Referred for Pulmonary Vein Isolation: A Real-Time Three-Dimensional Transesophageal Echocardiography Study
Masaki Iizumo, Kengo Suzuki, Ryo Kamijima, Manabu Takai, Makoto Takano, Tomoo Harada, Fumihiko Miyake, Yoshihiro J. Akashi. St. Marianna University School of Medicine, Kawasaki, Japan

P2-11
Impact of Aortic Valve Morphology on Assessment of Anatomical Aortic Valve Area in Patients with Aortic Stenosis: A Comparison with Two-Dimensional Versus Three-Dimensional Transesophageal Echocardiography
Masaki Iizumo, Kengo Suzuki, Takashi Machida, Ryo Kamijima, Kei Mizukoshi, Mariko Manabe-Uematsu, Manabu Takai, Tomoo Harada, Fumihiko Miyake, Yoshihiro J. Akashi. St. Marianna University School of Medicine, Kawasaki, Japan

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Three Dimensional Echocardiographic Evaluation of Mitral Apparatus during Preload Manipulation in Patients with Hypertrophic Cardiomyopathy
Hyemoon Chung, Ji-Hyun Yoon, Jong-Youn Kim, Pil-Ki Min, Young Won Yoon, Byoung-Kwon Lee, Bum-Kee Hong, Se-joong Rim, Hyuck Moon Kwon, Eui-Young Choi. Gangnam Severance Hospital, Yonsei University College of Medicine, Seoul, Republic of Korea

P2-13
Real-Time Three-Dimensional Transesophageal Echocardiography in Evaluation of Changes in Mitral Valve After Successful Surgical Repair for Severe Regurgitation
Javier Berdejo, Kenji Harada, Kentaro Shibayama, Takahiro Shiota. Cedars-Sinai Medical Center, Los Angeles, CA

P2-14
Assessment of Left Atrial Volume by Novel Semi-Automated Three-Beat Averaging 3D Echocardiography in Patients with Atrial Fibrillation: Validation with Cardiac CT
Run Heo1, Geu-Ru Hong1, Young Jin Kim2, Sanghoon Shin2, In-Jeong Cho1, Jang-Won Son1, Chi Young Shim2, Hyuk-Jae Chang2, Jong-Won Ha1, Namsik Chung1. 1Severance Cardiovascular Hospital, Seoul, Republic of Korea; 2Severance Hospital, Radiology, Seoul, Republic of Korea

P2-15
Comparison of Mitral Valve Area between Single and Dual MitraClip Device Deployment: A Real-time 3-Dimensional Transesophageal Echocardiographic Study
Jun Tanaka1, Takashi Matsumoto1, Wen Loong Yeow1, Kenji Harada1, Javier Berdejo2, Kentaro Shibayama1, Kazumasa Harada2, Saibal Kar1, Takahiro Shiota1. 1Cedars-Sinai Medical Center, Los Angeles, CA; 2Tokyo Metropolitan Geriatric Hospital, Itabashi-ku Tokyo, Japan

P2-16
Left Ventricular Geometry and Function Assessed by Three-dimensional Echocardiography Acutely Reflect Volume Overload in Patients Undergoing Hemodialysis
Attila Kovács1, Katalin Solymossy1, Astrid Apor1, Mária Faludi2, Virág Réti2, Péter Studinger3, András Tislér3, Klára Berta2, Béla Merkely1. 1Heart and Vascular Center, Budapest, Hungary; 2Fresenius Medical Care, Budapest, Hungary; 31st Department of Internal Medicine, Budapest, Hungary

P2-17
Feasibility of Three-Dimensional and Real-Time Three-Dimensional Left Ventricular Ejection Fraction Assessment in Routine Clinical Practice
Samuel D. Hillier, Kris Guppy-Coles, Kym Smith, Ada Lo, John Younger, John Atherton, Sandhir Prasad. The Royal Brisbane and Women’s Hospital, Brisbane, Australia

P2-18
Inaccuracy of Distance Measurement Using Three-Dimensional Echocardiography
Natalie Jayaram1, Mark Scheurer1, Girish Shirali3, Karina Carlson1. 1Children’s Mercy Hospitals and Clinics, Kansas City, MO; 2Medical University of South Carolina, Charleston, SC
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Differences of Mitral Leaflet Topography in Ischemic and Dilated Cardiomyopathy with Functional Mitral Regurgitation
Wei Feng1, Fang Fang2, Randolph Wong1, Ming Hsiung2, Cheuk-Man Yu, Alex P-W Lee1. 1The Chinese University of Hong Kong, Hong Kong, Hong Kong; 2Cheng Hsin General Hospital, Taipei, Taiwan

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Real-Time Three-dimensional Transthoracic Echocardiography can Reliably Predict the Annuloplasty Ring Size in Patients Undergoing Mitral Valve Repair
Dina Labib, Hussien Kassem, Ahmed Gaafar, Tarek Marei, Maged Salah, Soliman Ghareeb. Cairo University Hospital, Cairo, Egypt

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Three-Dimensional Transesophageal Echocardiography of the Fontan Procedure
Waseem Cossor, Saad Siddiqui, Vivian Wei Cui, David A. Roberson. Heart Institute for Children, Advocate Children’s Hospital, Oak Lawn, IL
Author Disclosures: V. Cui: 1 (Philips Healthcare); D. Roberson: 1 (Philips Healthcare)

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Quantification of Interventricular Contractile Discoordination by Three-Dimensional Area Tracking Strain in Patients with Chronic Pulmonary Hypertension
Keiko Ryo, Tetsuari Onishi, Josef Marek, Mohamed Ahmed, Kristina Haugaa, Hunter Champion, John Gorcsan, III. University of Pittsburgh, Pittsburgh, PA
Author Disclosures: J. Gorcsan: 2 (Medtronic, Biotronik, Toshiba), 4 (Medtronic, Biotronik, St. Jude Medical, Toshiba, GE)
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Evaluation of Right Ventricular Global and Regional Volume and Systolic Function in Patients with Atrial Septal Defect Using Real-time Three-Dimensional Echocardiography  
Dehong Kong, Haohua Yao, Lili Dong, Daxin Zhou, Xianhong Shu. Zhongshan Hospital, Fudan University, Shanghai, China

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Kikuo Obase1, Ken Saito1, Tomoko Tamada1, Koichiro Imai1, Hiroaki Hayashida1, Hiroyuki Okura1, Masashi Komeda2, Kiyoshi Yoshida2. 1China Medical University Hospital, Taichung, Taiwan; 2, Kececioglu. HDZ-NRW, Bad Oeynhausen, Germany

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Jun Tanaka1, Kenji Harada1, Javier Berdejo1, Kentaro Shibayama1, Masaki Izumo1, Takeji Saitoh1, Kazumasa Harada2, Takahiro Shiota1. 1Cedars-Sinai Medical Center, Los Angeles, CA; 2Tokyo Metropolitan Geriatric Hospital, Itabashi-ku Tokyo, Japan

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Jun Tanaka1, Kenji Harada1, Berdejo Javier1, Kentaro Shibayama1, Masaki Izumo1, Takeji Saitoh1, Kazumasa Harada2, Takahiro Shiota1. 1Cedars-Sinai Medical Center, Los Angeles, CA; 2Tokyo Metropolitan Geriatric Hospital, Itabashi-ku Tokyo, Japan

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Tien-En Chen1, Rakesh M. Suri2, Maurice Enriquez-Sarano1 Enriquez-Sarano2, Hector I. Michelen2, Harold M. Burkhart2, Shane M. Gillespie3, Geoffrey L. Hayward3, Sunil V. Mankad4. 1China Medical University Hospital, Taichung, Taiwan; 2Mayo Clinic, Rochester, MN

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Structural Analysis of Valve Deterioration Long after Stentless Aortic Bioprosthesis Replacement by Three-Dimensional Transesophageal Echocardiography  
Haruki Eguchi, Takeshi Maruo, Tatsuhiko Komiya, Kazushige Kadota, Kazuaki Mitsudo. Kurashiki Central Hospital, Kurashiki, Japan

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Kamran Haleem1, Eric Oligino1, Benjamin A. Lin1, Neil Brysoewicz1, Estelle Camus2, Joel Mancina2, Jude Clancy2. Joseph A. Kacz1, Lissa Sugeng1. 1Yale New Haven Hospital, New Haven, CT; 2Siemens Medical Solutions, Malvern, PA

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Loic Hilpert, Julien Wain Hobson, Arnaud Pellissier, Fabien Labombarda, Eric Saloux. Caen University Hospital, Caen, France

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Harish Raj Seetha Rammohan, Agustina Saenz, Beatriz Cepeda-Valery, Abel Romero-Corral, Kinnari Murthy, Solomon Praveen Samuel, Gregg S. Pressman. Albert Einstein Medical Center, Philadelphia, PA

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Koji Kurosawa, Kazuaki Negishi, Rieko Tateno, Kuniko Masuda, Masaru Obokata, Yoshiaki Houjou, Masahiro Nakajima, Masahiko Kurabayashi. Gunma University Graduate School of Medicine, Maebashi, Japan

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Kai T. Laser, Jan P. Horst, Andrea Kelter-Klöpping, Hermann Körperich, Nikolaus A. Haas, Axel Moysisch, Eugen Sandica, Deniz Kececioglu. HDZ-NRW, Bad Oeynhausen, Germany
P2-36  Consistency of Agreement between Independent Assessors of Three-Dimensional Global Longitudinal Strain of Whole Right Ventricle and Only Right Ventricle Free Wall Using Transthoracic Echocardiography
Koya Ozawa, Nobusada Funabashi, Tomoko Kamata, Noriyuki Yanagawa, Nobuhiro Tanabe, Koichiro Tatsumi, Yoshio Kobayashi. Chiba University Graduate School of Medicine, Chiba, Japan

P2-37  Dynamic Mitral Valve Annular and Leaflet Characteristics in Varying Degrees of Ischemic Mitral Regurgitation Using Matrix TEE
Caroline Morbach1, Diego Bellavia2, Pramod Bonde1, Abeel Mangi1, David Yuh1, Irena Vaitkeviciute1, Lynn Weinert1, Berthold Klas3, Lissa Sugeng1. 1Yale University School of Medicine, New Haven, CT; 2University of Chicago, Chicago, IL; 3TomTec® Imaging Systems, Munich, Germany
Author Disclosures: B. Klas: 5 (TomTec® Imaging Systems, Munich, Germany)

P2-38  Myocardial Deformation Analysis with High Resolution Full Volume Real Time 4D Echocardiography is Reliable and Reproducible
Sowmya Balasubramanian1, Rajesh Punn1, Helene Houle2, Theresa A. Tacy1. 1Lucile Packard Children’s Hospital, Stanford University School of Medicine, Palo Alto, CA; 2Siemens Medical Solutions, Mountainview, CA

P2-39  Does Atrial Fibrillation Remodel the Mitral Valve Annulus? A Three-Dimensional Analysis
Eric Oligino, Ben Lin, Kamran Haleem, Jude Clancy, Joseph Akar, Lissa Sugeng. Yale-New Haven Hospital, New Haven, CT

P2-40  Utility of Three-Dimensional Global Longitudinal Strain of the Right Ventricular Free Wall Using Transthoracic Echocardiography for Right Ventricular Systolic Function in Pulmonary Hypertension
Koya Ozawa, Nobusada Funabashi, Akihisa Kataoka, Noriyuki Yanagawa, Nobuhiro Tanabe, Koichiro Tatsumi, Yoshio Kobayashi. Chiba University Graduate School of Medicine, Chiba, Japan

P2-41  Left Ventricular Remodeling can be Predicted with Left Ventricular Volume Response During 3-Dimensional Dobutamine Stress Echocardiography After Acute Myocardial Infarction
Yuko Yamanaka, Toshinari Onishi, Katsuomi Iwakura, Atsunori Okamura, Yasushi Koyama, Motoo Date, Koichi Inoue, Kenshi Fujii. Sakurabashi Watanabe Hospital, Osaka, Japan

P2-42  Feasibility of Training Nurses to Evaluate Semi-automated 3-dimensional Left Ventricular Ejection Fraction Using a Customised Workstation-based Training Protocol
Kristyan Guppy-Coles, Samuel Hillier, Kym Smith, Ada Lo, Sandhir B. Prasad, John Atherton. Royal Brisbane and Women’s Hospital, Brisbane, Australia

P2-43  Three-dimensional Echocardiography en face Views of Ventricular Septal Defect: Comparison of the Efficacy, Advantages and Limitations of Image Acquisition and Cropping Protocols
Waseem Cossor, Saad Siddiqui, Vivian Wei Cui, David A. Roberson. Advocate Hope Children’s Hospital, Heart Institute for Children, Oak Lawn, IL

P2-44  Incremental Predictive Value of Left Ventricular Ejection Fraction Obtained by Cardiac Magnetic Resonance Imaging in Patients with Heart Failure: Comparison With 3D Speckle Tracking Echocardiography
Aasha S. Gopal1, Samir K. Saha2, Rena S. Toole1, Anatoli Kiotsekoglou1, Jie Cao1, Nathaniel Reichek1. 1St. Francis Hospital, Roslyn, NY; 2Sundsvalls Hospital, Sundsvall, Sweden

P2-45  Accurate Diagnosis of Bicuspid Aortic Valve by Three Dimensional Transesophageal Echocardiography
Hisao Yoshikawa, Makoto Suzuki, Go Hashimoto, Yukiko Kusunose, Takenori Otsuka, Masato Nakamura, Kaoru Sugi. Toho University Ohashi Medical Center, Tokyo, Japan

P2-46  Aortic Anulus Measurement with a Novel 3-Dimensional Transesophageal Echocardiography Method and Its Correlation with Open Surgical Aortic Valve Sizing
George Gellert, Ashish Pershad, Kennith Fang. Cavanagh Heart Center, Banner Good Samaritan Medical Center, Phoenix, AZ
Author Disclosures: G. Gellert: 1 (Medco), 2 (Philips, Edwards); A. Pershad: 1 (Medtronic, Abbott, Boston Scientific), 2 (Bridgepoint)

P2-47  Comparison of Three-dimensional Echocardiographic Left Ventricular Volume Assessment from Different Acoustic Windows
Jin-Sun Park, Jeoung-Sook Shin, You-Hong Lee, Byoung-Joo Choi, So-Yeon Choi, Myeong-Ho Yoon, Gyo-Seung Hwang, Seung-Jea Tahk, Joon-Han Shin. Ajou University School of Medicine, Suwon, Republic of Korea

P2-48  Single-Beat Real-Time Three-Dimensional Echocardiographic Automated Contour Detection for Quantification of Left Ventricular Volumes and Systolic Function
Ben Ren, Wim B. Vletter, Jackie McGhie, Osama I. I. Soliman, Marcel L. Geleinse. Erasmus University Medical Center, Rotterdam, Netherlands
Ischemic Heart Disease/ Stress Echocardiography
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P2-49  Moderated Poster
Dynamic Changes of Left Ventricular Apical Rotation During Exercise and its Relation with Changes of Left Ventricular Diastolic Pressures with Exercise: A Simultaneous Cardiac Catheterization and Echocardiographic Study
Sung-Jin Hong, Chi Young Shim, Sun-Ha Moon, Hyun-Jin Lee, Jin-Kyung Lee, Gee-Ru Hong, Yangsoo Jang, Jong-Won Ha. Yonsei University Health System, Seoul, Republic of Korea

P2-50  Moderated Poster
Left Atrial Size by Echocardiography is a Strong Independent Predictor of Reverse Remodeling in Patients with Ischemic Cardiomyopathy
Prasanna Sengodan, Pradeep K. Bhat, Sanjay Gandhi. MetroHealth Campus of Case Western Reserve University, Cleveland, OH

P2-51  Kinetics of Wave Propagation during Late Diastole: Relationship with Tissue Distensibility, Loading and Material Properties
Cristina Pislaru, Sorin V. Pislaru, Patricia A. Pellikka. Mayo Clinic, Rochester, MN

P2-52  Immediate Exercise Stress Echocardiography is Safe and Cost-Effective for Low Risk Chest Pain Patients in the Emergency Department
Yuanyuan Zhang, Brian Levine, Zugui Zhang, Mary-Stewart Grote, Danielle Minett, Avkash Patel, Abhishok Rao, Erik Marshall. Christiana Care Health System, Newark, DE

P2-53  Global Longitudinal Strain During Dobutamine Stress Echocardiography can Predict Left Ventricular Remodeling after Anterior Wall Acute Myocardial Infarction
Toshinari Onishi, Katsuomi Iwakura, Yuko Yamanaka, Atsunori Okamura, Yasushi Koyama, Motoo Date, Koichi Inoue, Kenshi Fuji. Sakurabashi Watanabe Hospital, Osaka, Japan

P2-54  Comparison of Fractional Flow Reserve Assessment with Stress Myocardial Contrast Echocardiography in Angiographically Significant Coronary Stenoses
Juefei Wu, Feng Xie, Edward O’Leary, John Steuter, Thomas R. Porter. University of Nebraska Medical Center, Omaha, NE

P2-55  Incremental Value of Rest Echocardiographic Findings Over Conventional Stress Echocardiography for Diagnosing Myocardial Ischemia
Hiroto Utsunomiya, Takayuki Hidaka, Yasuki Kihara. Hiroshima University Graduate School of Biomedical and Health Sciences, Hiroshima, Japan

P2-56  The Obesity Paradox and Predicting Obese Patient Outcome with Real Time Myocardial Contrast Stress Echocardiography
Thomas R. Porter1, Valentina Lorenzoni2, Juefei Wu1, Feng Xie1, Nicola Gaibazzi1. 1University of Nebraska Medical Center, Omaha, NE; 2Parma University Hospital, Parma, Italy
Author Disclosures: T. Porter: 4 (Lantheus, Astellas, General Electric, Philips)

P2-57  Degree of Non-infarcted Myocardial Fibrosis Measured by T1 Mapping is a Determinant of Left Atrial Volume in Patients with Reperfused Acute Myocardial Infarction
Eui-Young Choi1, Chul Hwan Park2, Jung-Joon Cha1, Hyemoon Chung1, Ji-Hyun Yoon1, Jong Youn Kim1, Pil-Ki Min1, Young Won Yoon1, Byoung Kwon Lee2, Bum-Kee Hong1, Tae Hoon Kim1, Se-Joong Rim1, Hyuck Moon Kwoi1. 1Division of Cardiology, Gangnam Severance Hospital, Yonsei University College of Medicine, Seoul, Republic of Korea; 2Department of Radiology, Gangnam Severance Hospital, Seoul, Republic of Korea

P2-58  Determinants of Exercise Capacity in Chagasic and Ischemic Heart Failure: Role of Left Atrial Volume and Right Ventricular Function
Maria E. O. Otto1, Alexandra C. L. Sanchez2, Adenalva L. S. Beck2, Marianne L. Silva3, Gerson C. Junior3. 1Cardiology Institute (ICDF), Brasilia, Brazil; 2Instituto de Cardiologia do Distrito Federal (ICDF), Brasilia, Brazil; 3Universidade de Brasilia (UnB), Brasilia, Brazil

P2-59  Diabetes a Coronary Artery Disease Risk Equivalent in Patients with Abnormal Stress Echocardiography
Vikram V. Agarwal1, Siu-Sun Yao2, Farooq A. Chaudhry1. 1St. Luke’s Roosevelt Hospital Center, New York, NY; 2Valley Health System, Ridgewood, NJ
Author Disclosures: F. Chaudhry: 1 (Lantheus Medical Imaging, GE Medical Imaging), 4 (Siemens)

P2-60  Diagnostic Accuracy of Stress Echocardiography for the Assessment of Acute Coronary Syndrome in the Emergency Department. A Meta-analysis of Prospective Trials
Jorge Romero1, Dinesh Kadaria2, Khalid Mojaididi3, Florentino A. Lupercio3, Harikrishna Makani3, Mario Garcia1. 1Montefiore Medical Center, Bronx, NY; 2St. Lukes Medical Center, Manhattan, NY; 3Jacobi Medical Center, Bronx, NY
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P2-61 Feasibility of Supine Bicycle Stress Echocardiography Versus Treadmill Exercise Stress Echocardiography at an Academic Urban Medical Center
Neeraja Yedlapati, Faraj Kargoli, Eliany Mejia-Lopez, Cynthia Taub. Montefiore Medical Center, Bronx, NY

P2-62 Treadmill Workstation for the Echocardiography Laboratory
Monica Tung, Thomas Knickelbine, Kevin M. Harris. Minneapolis Heart Institute Foundation at Abbott Northwestern Hospital, Minneapolis, MN

P2-63 Effect of Ischemia on Distribution of Speckle Tracking Imaging Parameters for Assessing the Regional Function in Myocardial Infarction
Krasimira A. Hristova, Dobrin Vasilev, Pavlin Palov, Tzvetana Katova, Iana Simova, Velislava Kostova. National Heart Hospital, Sofia, Bulgaria

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P2-64 Moderated Poster
Maturational Changes of Right and Left Ventricular Longitudinal Strain in Premature Infants
Philip T. Levy, Mark R. Holland, Timothy J. Sekarski, Aaron Hamvas, Amit Mathur, Caroline Lee, Gautam K. Singh. Washington University Medical School, St. Louis, MO

P2-65 Moderated Poster
Gender Differences in the Relationship Between Ventricular-vascular Coupling and Myocardial Deformation Properties Assessed by Speckle Tracking Echocardiography
Woo-In Yang, Jin-Sun Kim, Sang-Hoon Kim, Jae-Youn Moon, Jung-Hoon Sung, In-Jai Kim, Sang-Wook Lim, Dong-Hoon Cha, Seung-Yun Cho. CHA Bundang Medical Center, CHA University, Sungnam, Republic of Korea

P2-66 Moderated Poster
Incremental Value Right Ventricular Function Assessment Using Two-dimensional Strain in Experimental Swine Models of Chronic Pulmonary Hypertension
Jaume Aguero, Kiyotake Ishikawa, Makoto Amaki, Iratxe Zarragoikoetxea, Gianni Pedrizzetti, Kenneth M. Fish, Jagat Narula, Roger J. Hajjar, Partho P. Sengupta. Mount Sinai School of Medicine, New York, NY

P2-67 Moderated Poster
Clinical, Electrocardiographic and Echocardiographic Features of Cardiac Resynchronization Patients with Widened QRS who Lack Mechanical Dyssynchrony
Kristina H. Haugaa, Josef Marek, Mohamed Ahmed, Keiko Ryo, Evan Adelstein, Samir Saba, John Gorcsan, III. University of Pittsburgh, Pittsburgh, PA
Author Disclosures: J. Gorcsan: 2 (Medtronic, Biotronik, Toshiba), 4 (Medtronic, Biotronik, St. Jude Medical, Toshiba, GE)

P2-68 Moderated Poster
Relationship between Shear Elasticity of the Myocardium and Ventricular Chamber Pressure
Author Disclosures: J. Greenleaf: 6 (Phillips)

P2-69 Lung Doppler Signals in Patients with Atrial Fibrillation or Flutter
Itzhak Kronzon1, Avraham Unterman2, Daniel Weiler2, Emma Solter2, Rachel Schatzberger2, Palti Yoram2. 1Lenox Hill Hospital, New York, NY; 2EchoSense Ltd., Haifa, Israel
Author Disclosures: A. Unterman: 5 (EchoSense Ltd.); D. Weiler: 5 (EchoSense Ltd.); E. Solter: 5 (EchoSense Ltd.); R. Schatzberger: 5 (EchoSense Ltd.); P. Yoram: 5 (EchoSense Ltd.)

P2-70 The Influence of Angle of Insonation on Speckle Tracked Strain
Daniel Forsha1, Niels Rism2, Sudarshan Rajagopal1, Christoph Hornik1, Joseph Kisslo1, Piers Barker1. 1Duke University Medical Center, Durham, NC; 2Aalborg University, Aalborg, Denmark
Author Disclosures: J. Kisslo: 1 (General Electric, Phillips), 3 (Volumetrics)

P2-71 Two Dimensional Global Longitudinal Strain of Right Ventricle Using Transthoracic Echocardiography Could Detect Right Ventricular Fibrosis Confirmed by 320 Slice CT in Pulmonary Hypertension
Koya Ozawa, Nobusada Funabashi, Akihisa Kataoka, Noriuyki Yanagawa, Nobuhiro Tanabe, Koichiro Tatsumi, Yoshiho Kobayashi. Chiba University Graduate School of Medicine, Chiba, Japan

P2-72 Comparison of Histological Findings seen on Endomyocardial Biopsy to Speckle Tracking Echocardiography Derived Strain in Pediatric Heart Transplant Patients
Ricardo Pignatellil1, S. Kristen Sexson Tejtel1, Qiqiong Cui1, William J. Dreyer1, Sarah Sami1, Kathleen Kendall2, Susan Denfield1, Aamir Jeewa1. 1Baylor College of Medicine, Houston, TX; 2Texas Children’s Hospital, Houston, TX

P2-73 Use of Echocardiography to Characterize and Time Circulatory Changes Associated with Normal Postnatal Adaptation in Human Neonates
Amish Jain1, Adel Mohamed1, Robert P. Jankov2, Brian Kavanagh2, Patrick J. McNamara1, Benjamin Valdez2, Jonathan Thrush2, Brian Beck1, 1Mount Sinai Hospital, Toronto, ON, Canada; 2Hospital for Sick Children, Toronto, ON, Canada

P2-74 Correlates of Echo Doppler Changes During Normal Pregnancy
Meena Narayanan, Salima Qamaruddin, Ming-Sum Lee, Alyssa Bamba, Alice Stek, Reza Rafie, Mohammad Ghalichi, Samuel Daneshvar, Larisa Yedigarova, Urmila Kidwai, Tasneem Z. Naqvi. Keck School of Medicine, Los Angeles, CA
Author Disclosures: T. Naqvi: 4 (Philips Ultrasound, Atcor Medical)
P2-75
Prognostic Utility of Myocardial Deformation Measurement in Patients with Radiation-induced Heart Disease
Srisakul Chirakarnjanakorn, Zoran B. Popovic, Willis Wu, Ahmad Masri, Nicholas G. Smedira, Bruce W. Lytle, Brian P. Griffin, Milind Y. Desai. Cleveland Clinic, Cleveland, OH

P2-76
Serial Averaged Global Longitudinal Strain Measurements in Systemic Light-chain Amyloidosis Patients Undergoing Myeloablative Chemotherapy and Autologous Stem Cell Transplantation
Paolo P. Gabriel, Reyhaneh Akhavein, Muhammad Ashraf, David Sahn, Emma Scott, William Dibb, James Dibb, Richard T. Maziarz, Stephen Heitner. Oregon Health & Science University, Portland, OR

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Two-dimensional Speckle Tracking Echocardiography in Early Detection and Prediction of Cardiotoxicity During Epirubicine Based Chemotherapy
Yu Kang, Lin Li, Minmin Sun, Cuizhen Pan, Xianhong Shu. Zhongshan Hospital, Fudan University, Shanghai, China

P2-78
Strain by Speckle Tracking Echocardiography in Pediatric Heart Transplant Patients Compared to the Normal Population
Ricardo Pignatelli1, S. Kristen Sexson Tejtel1, Qiqiong Cui1, William J. Dreyer1, Sarah Sami2, Kathleen Kendall2, Susan Denfield3, Aamir Jeewa4. 1Baylor College of Medicine, Houston, TX; 2Wake Forest University School of Medicine, Winston-Salem, NC

P2-79
The Timing of Early Diastolic Left Ventricle Expansion in the Failing Heart: Differences between Longitudinal and Circumferential Factors
Hiroyuki Iwano, Min Pu, William C. Little. Wake Forest University School of Medicine, Winston-Salem, NC

P2-80
The Determinants of Early Diastolic Intra Left Ventricle Pressure Difference
Hiroyuki Iwano1, Min Pu1, Bharathi Upadhy1, Brett Meyers2, Pavlos Vlachos2, William C. Little1. 1Wake Forest University School of Medicine, Winston-Salem, NC; 2School of Biomedical Engineering and Sciences, Virginia Tech, Blacksburg, VA

P2-81
Potential Diagnostic Tool of Two-dimensional Speckle-Tracking Strain to Identify Subclinical Myocardial Dysfunction in Patients with Systemic Sarcoidosis with Preserved Ejection Fraction
Yumiko Kano1, Hidekazu Tanaka2, Takayuki Tsuji2, Takuma Sawa2, Yoshiki Yamadori2, Junichi Imanishi2, Yoshiki Motoji2, Tatsuya Miyoshi3, Yasuhide Mochizuki4, Mana Hiraishi5, Akihiro Kaneko6, Yuko Fukuda6, Kazuhiro Tatsumi6, Tetsuari Onishi1, Kensuke Matsumoto1, Tetsushi Yamamoto1, Takamitsu Imanishi1, Nobuhide Hayashi1, Hiroya Kawai1, Ken-ichi Hirata2, Seiji Kawano1. 1Kobe University Hospital, Kobe, Japan; 2Kobe University Graduate School of Medicine, Kobe, Japan

P2-82
Cyclic Changes in Aortic Annulus Diameter Caused by Aortic Valve Disease
Hisao Yoshikawa, Makoto Suzuki, Go Hashimoto, Yukiko Kusunose, Takenori Otsuka, Masato Nakamura, Kaoru Sugi. Toho University Ohashi Medical Center, Tokyo, Japan

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Better Agreement between Independent Assessors of Three-Dimensional Global Longitudinal Strain of Whole Right Ventricle Using Transthoracic Echocardiography than for Other Three-Dimensional Right Ventricular Parameters
Koya Ozawa, Nobusada Funabashi, Tomoko Kamata, Noriyuki Yanagawa, Nobuhiro Tanabe, Koichiro Tatsumi, Yoshiho Kobayashi. Chiba University Graduate School of Medicine, Chiba, Japan

P2-84
Comparison of Left Ventricular Deformation in Post-infarction Versus Chronic Ischemic Remodeling: Two-dimensional Strain Imaging Study in Swine Models of Acute and Chronic Total Coronary Artery Occlusions
Kiyotake Ishikawa, Jaume Aguero, Makoto Amaki, Kenneth Fish, Gianni Pedrizzetti, Jagat Narula, Roger J. Hajjar, Partho P. Sengupta. Mount Sinai School of Medicine, New York, NY

P2-85
Assessing the Right Ventricular Response to Right Ventricular Afterload: Pulmonary Arterial Resistance, Compliance and Right Ventricular Systolic Strain
Sheng Ying Chung, Garvan C. Kane. Mayo Clinic, Rochester, MN

P2-86
Effect of Bicycle Exercise on Left and Right Ventricular Hemodynamics in Patients with Diastolic Dysfunction
Meena Narayanan, Alyssa Bamba, Tasneem Z. Naqvi. Keck School of Medicine, Los Angeles, CA

P2-87
Right Ventricular Dysynchrony and Hemodynamics in Patients with Chronic Thromboembolic Pulmonary Hypertension Following Balloon Pulmonary Angioplasty
Yoshiki Motoji, Hidekazu Tanaka, Yuku Fukuda, Keiko Ryo, Takuma Sawa, Yoshiki Yamadori, Junichi Imanishi, Tatsuya Miyoshi, Yasuhide Mochizuki, Mana Hiraishi, Akihiro Kaneko, Kazuhiro Tatsumi, Tetsuari Onishi, Kensuke Matsumoto, Toshiro Shinke, Noriaki Emoto, Hiroya Kawai, Ken-ichi Hirata. Division of Cardiovascular Medicine, Department of Internal Medicine, Kobe University Graduate School of Medicine, Kobe, Japan
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Atrial Electromechanical Coupling Interval as a Possible Indicator of Atrial Dysfunction
Jan E. J. Claessens, Sr.1, Philip Claessens, Jr.2, Christophe Claessens, Jr.3, Marc Claessens, Jr.4, Maria Claessens5. 1AZ Monica, Antwerp, Belgium; 2AZ Sint Jozef, Malle, Belgium; 3AZ Turnhout, Turnhout, Belgium; 4AZ Klinia, Brasschaat, Belgium; 5Outpatients’ Cardiological Clinic Kloppend Hart, Antwerp-Schilde-Essen, Belgium

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Favorable Effect of Nitroglycerin on Left Ventricular Pulsatile Load in Heart Failure with Preserved Ejection Fraction
Philip Haines1, Prithvi Shiva-Kumar1, Salvatore Geraci2, Rahul Chandrashekhar2, Snigdha Jain3, Amin Vakilipour1, Victor Ferrari1, Scott Akers3, Julio Chirinos3. 1University of Pennsylvania, Philadelphia, PA; 2Philadelphia VA Medical Center and University of Pennsylvania, Philadelphia, PA; 3Philadelphia VA Medical Center and University of Pennsylvania, Philadelphia, PA

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Left Ventricular Strain as a Prognostic Marker in Patients with Chronic Aortic Regurgitation
Sun Hee Park, Dong Heon Yang, Jae Hee Kim, Se Yong Jang, Myung Hwan Bae, Jang Hoon Lee, Hun Sik Park, Yongkeun Cho, Shung Chull Chae. Kyungpook National University Hospital, Daegu, Republic of Korea

P2-91
Left Ventricular Systolic and Diastolic Function in Pediatric Patients with Systemic Lupus Erythematosus: Insights from Myocardial Two-Dimensional Strain Echocardiography
Gabriela N. Leal1, Camila Paiva1, Clovis A. A. Silva1, Cláudio Leone2, Kellen Freitas3, Alessandro C. Lianza3, Gustavo Favaro3, Samira S. Morhy1, José L. Andrade1, 1Instituto da Criança do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil; 2Faculdade de Saúde Pública da Universidade de São Paulo, São Paulo, Brazil; 3Instituto de Radiologia do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil

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Left Atrial Strain Significantly Correlate with CHA2DS2-VASc Score
Koji Kurosawa, Kazuaki Negishi, Rieko Tateno, Kuniko Masuda, Masaru Obokata, Yoshiaki Houjou, Masahiro Nakajima, Masahiko Kurabayashi. Gunma University Graduate School of Medicine, Maebashi, Japan

P2-93
Impaired Left Atrial Function Despite Sinus Rhythm and Normal Left Atrial Volume in Patients with a History of Atrial Fibrillation
Angela B. S. Santos1, Deepak Gupta1, Michael Zile2, Carolyn Lam3, Inder Anand4, Sam Asirvatham5, Andrew Koren6, Amil Shah1, Scott D. Solomon1. 1Brigham and Women’s Hospital, Boston, MA; 2Medical University of South Carolina, Charleston, SC; 3National University of Singapore, Singapura, Singapore; 4Minneapolis VA Hospital, Boston, MN; 5Mayo Clinic, Rochester, MN; 6Sanofi-Aventis, New York, NY

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1Northwestern University Feinberg School of Medicine, Chicago, IL; 2First Cardiology Consultants, Lagos, Nigeria

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Author Disclosures: J. Gorcsan: 2 (Medtronic, Biotronik, Toshiba), 4 (Medtronic, Biotronik, St. Jude Medical, Toshiba, GE)

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Author Disclosures: E. Sloth: 1 (GE Healthcare)

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Author Disclosures: B. Sorian: 2 (Ventripoint Diagnostics, Ltd.); R. Otto: 2 (Ventripoint Diagnostics, Ltd.)

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Federico M. Asch1, Siddharth K. Prakash2, Mary J. Roman3, Richard B. Devereux1, Jacqueline French1, William Ravekes4, Kim A. Eagle5, Liliana Preiss5, Neil J. Weissman6. 1Medstar Health Research Institute and Medstar Washington Hospital Center, Washington, DC; 2University of Texas Medical School, Houston, TX; 3Weill Cornell Medical College, New York City, NY; 4Medstar Health Research Institute, Washington, DC; 5Johns Hopkins University School of Medicine, Baltimore, MD; 6University of Michigan, Ann Arbor, MI; 7RTI, Rockville, MD
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Melissa K. Webb1, Scott R. Auerbach2, Adel K. Younoszai2, Bruce F. Landeck, II2. 1UT Southwestern Medical Center at Dallas, Dallas, TX; 2Children’s Hospital Colorado, University of Colorado, Aurora, CO

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Bethany L. Wisotzkey2, Christoph P. Hornik2, Piers C. A. Barker1. 1Duke Department of Pediatrics, Duke University Medical Center, Durham, NC; 2Duke Clinical Research Institute and Duke Division of Pediatric Cardiology, Duke University Medical Center, Durham, NC

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In Primary Fetal Cardiomyopathy, Concurrent use of the Tei Index and the Cardiovascular Profile Score May Improve Prognostic Value
David S. Ezon, Nancy A. Ayres, Carolyn A. Altman, Susan W. Denfield, Shaine A. Morris, Shiraz A. Maskatia. Baylor College of Medicine, Texas Children’s Hospital, Houston, TX
With great volume comes great expertise. Texas Children’s Heart Center’s leadership in cardiology and cardiovascular surgery is responsible for outcomes that are among the best in the nation. Our multidisciplinary team of fetal cardiac specialists uses an innovative and comprehensive approach to patient care. Whether it’s transposition of the great arteries, twin-twin transfusion syndrome or another fetal condition impacting the heart, we provide expert diagnoses, monitoring and counsel during prenatal and postnatal care. Of course, with every echocardiogram we conduct, each patient is our number one priority – and that’s the number that really counts.

texaschildrens.org/heartoutcomes
Winning an endurance race means knowing when to sprint.

www.regonline.com/runforecho2

Lace up your sneakers, get some fresh air, and support efforts to advance cardiovascular ultrasound.

Start the day with us at 6:00 a.m. for the ASE 2nd Annual 5K Run/1 Mile Walk on Sunday, June 30, 2013, at the Scientific Sessions in Minneapolis, MN.

Visit Siemens in booth 901 to receive your race packet:
- **Saturday, June 29**
  - 4:30 p.m. – 6:30 p.m.
- **Sunday, June 30**
  - 9:00 a.m. – 4:00 p.m.

Packets available at the starting line before the race.

Answers for life.
WELCOME TO THE ASE EXPO

Where Innovation and Science Meet
The American Society of Echocardiography (ASE) encourages you to visit the ASE Exhibit & Poster Hall! The exchange of information and access to new concepts, technology, devices and research is a vital component of professional development. Get face-to-face with the industry’s leading developers and executives who can help you discover what’s new, assist you in making the right choices for your institution and show you ways to reduce costs and improve productivity. The showcase of investigators from around the world presenting cutting-edge research on the latest advances in cardiovascular ultrasound is a highlight of ASE’s annual meeting. Spend time in the poster area and gain firsthand knowledge and insight from scientific investigators. Don’t miss daily poster sessions on the show floor. More detailed information can be found on page 51 of this program.

Where Medical Professionals Meet
Network with colleagues and friends from around the world while experiencing the best our rapidly-changing industry has to offer, including the newest equipment and devices as well as the latest in research and development. While you’re here, grab a cup of coffee, lunch or snack. Check your email or print boarding passes in our complimentary E-mail Kiosk, booth #913, offered by Cardiovascular Credentialing International™ (CCI), booth #911.

ASE Headquarters Booth #515
Visit the ASE Headquarters booth #515 to find out what’s new with ASE and learn about the exciting changes taking place in the cardiovascular ultrasound field. At ASE Headquarters you’ll find comprehensive information on all of our educational programs and products, membership opportunities and advocacy efforts. In addition, don’t miss the debut of exciting new products and services designed to help with your practice of cardiovascular ultrasound. ASE is available to help you find whatever it is you need. While you’re there, don’t forget to pick up your complimentary copy of the updated ASE guidelines CD.

ASE Education and Research Foundation
The ASE Foundation (ASEF) is ASE’s charitable arm, helping to assure the viability and visibility of CV ultrasound. Investing in the Foundation is an investment in your profession, your field, and improved patient care. Monies raised through the 2013 Annual Appeal will support the following initiatives: 1) Research Awards to preserve dedicated time for investigators; 2) Guideline-based projects to standardize patient care; 3) Student and Fellow travel grants and scholarships to support training and educational conference participation to help foster future cardiovascular professionals; and, 4) Humanitarian missions and educational outreach projects to serve populations in need. By donating, you will become a recognized supporter of the ASEF and play a vital role in the future of echocardiography. There are a number of ways to donate including our online form and donor pledge cards which can be found at the ASE booth. You have the option to make a one-time gift or set a recurring donation amount on a yearly, quarterly or monthly basis. You will also be able to indicate one of the initiatives above that is most important to you. To learn more about donating, recognition programs, and upcoming ASEF activities, please visit ASE Headquarters or online at www.ASEFoundation.org. Join us in making a world of difference.

Food Functions
ASE will provide continental breakfast in the Convention Center Foyer from 7:00 am – 8:00 am daily. Morning and afternoon coffee breaks are available for registered attendees in the Exhibit & Poster Hall Sunday, June 30 and Monday, July 1, and in the Convention Center Foyer on Saturday, June 29 and Tuesday, July 2. Please refer to the Schedule-at-a-Glance on page 21 for the times of the daily morning, afternoon and lunch breaks.

ASE will provide lunch on a first-come, first serve basis (max. 350 participants) for Science & Technology Theatre attendees held in Room 101, Level 1. See page 91 of this program for a detailed theatre schedule.

SPECIAL EXHIBIT & POSTER HALL EVENTS
Connect@ASE
Participate in the global conversation on ASE’s networking platform, Connect@ASE (http://connect.asecho.org). This members-only site is the new host for our active discussion forums, our image library containing hundreds of moving images and our enhanced member directory to connect with colleagues.

Relax & Recharge Lounge Booth 921
Take a break in comfortable chairs while recharging your mobile device or talking with friends. ASE thanks the Society of Vascular Ultrasound (SVU), booth 1016, for providing the Relax & Recharge Lounge.

Email Kiosk
For your convenience, Internet access and printers for attendee use are available at the E-mail Kiosk in booth 913. ASE thanks Cardiovascular Credentialing International™ (CCI), booth 911, for sponsoring the E-mail Kiosk.

Echo Around the World
Located at the ASE Headquarters booth #515, visit Echo Around the World and explore literature and information from echocardiography societies worldwide. Take a trip around the world of echocardiography; no passports required.

President’s Reception
Saturday, June 29, 4:30 pm - 6:30 pm
All attendees are invited to celebrate ASE 2013 at the President’s Reception, hosted by ASE President, Patricia Pellikka, MD, FASE. The President’s Reception takes place in the Exhibit & Poster Hall. This is your first opportunity to network with colleagues and friends while learning more about the newest equipment and services in the cardiovascular field. Complimentary hors d’oeuvres and cocktails will be available from many stations throughout the hall.
Science & Technology Theatre Schedule

Located in Room 101, Level 1

**TOSHIBA**

**Toshiba**
Saturday, June 29, 11:30 am - 1:00 pm
Advancements in Echo Quantification for Earlier Detection and Diagnosis

**PHILIPS**

**Philips Healthcare**
Sunday, June 30, 11:45 am - 1:15 pm
Intelligence in Echo – Smart Ways to Make a Clinical Difference

**SIEMENS**

**Siemens Healthcare**
Monday, July 1, 11:45 am - 1:15 pm
Automated Quantification and Workflow Paradigms in Clinical 2D/3D Echocardiography of Heart Valve Disease

Science & Technology Theatre sessions are not a part of the official ASE 24th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed or affiliated with ASE. No CME credits will be given for attending these sessions.
Picture the perfect cardiac ultrasound system. Now take a closer look at Toshiba’s Aplio™ CV systems and you’ll see advancements in every aspect of technology and performance. From unsurpassed image quality that delivers exceptional depth and detail to sophisticated ergonomics and software enhancements that elevate efficiency to unmatched levels, Aplio CV defines a new era in performance. medical.toshiba.com

Visit Us at ASE 2013 Exhibit 415

Please Join Us for a Lunch and Learn
On the latest advancements in echo imaging and quantification for earlier diagnosis

Saturday, June 29
Presentations begin at 11:45 AM
Room 101, Level 1
Minneapolis Convention Center
Minneapolis, MN
Lunch will be provided

Science and Technology Theatre sessions are not a part of the official ASE 24th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed or affiliated with the ASE.
Join us for an Industry Theatre event

Intelligence in Echo – Smart ways to make a clinical difference

Science and Technology Theatre at ASE.2013

Sunday, June 30
11:45am – 1:15pm

LOCATION: Room 101

Test your echo intelligence by playing SonoScrabble during the symposium and be entered to win Atlas of 3D Echocardiography. Three winners will be drawn (winners must be present at time of drawing).

The symposium speakers will address bringing advanced diagnostic technologies into the mainstream echo environment. New workflow efficiencies in the interventional suite for complex structural heart disease repair procedures will also be explored.

Chair: Roberto Lang, MD, FASE
University of Chicago Medical Center, Chicago, IL

Co-Chair: Jose Luis Zamorano, MD
Head of Cardiology, University Hospital Ramón y Cajal, Madrid, Spain

Agenda
• Anatomic Intelligence in Echo
  – Wendy Tsang, MD (Toronto, Ontario Canada)
• Deformation Imaging for the Mainstream – Reducing Variability and Using Intelligence
  – Dave Prater (Andover, MA)
• Structural Heart Disease – Intelligence for Simplifying Procedures
  – Itzhak Kronzon, MD (New York, NY)

Science and Technology Theatre sessions are not a part of the official ASE 24th Annual Scientific Sessions as planned by the Program Committee, or in any way endorsed or affiliated with ASE.
How can automation enhance workflow and clinical decisions?

See how to take assumptions out of the equation.

www.usa.siemens.com/ASE2013

Join us on Monday, July 1
11:45 a.m. – 1:15 p.m.
Room 101

Explore practice-changing technology and workflow with some of ultrasound’s thought-leaders at the 2013 ASE Science and Technology Theatre Session*, Automated Quantification and Workflow Paradigms in Clinical 2D/3D Echocardiography of Heart Valve Disease. Chairs Dr. Mani Vannan and Dr. Patrizio Lancellotti will help you navigate through a range of clinical, case-based presentations covering the most up-to-date clinical applications that take automated quantification to the next dimension.

*Science and Technology Theatre sessions are not a part of the official ASE 24th Annual Scientific Sessions, as planned by the Program Committee, or in any way endorsed or affiliated with the ASE.
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*Please be sure to visit the booths of our 2012 Annual Appeal Supporters!*

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The American College of Cardiology is a 43,000-member nonprofit medical society and bestows the credential Fellow of the ACC upon physicians who meet its stringent qualifications. The College is a leader in the formulation of health policy, standards and guidelines, and is a staunch supporter of cardiovascular research.

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Flachskaempf, F. ................................................................. GE Healthcare (1)

Freishman, C. ................................................................. WL Gore Medical (2, 7)
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Weiner, R. ............................................................... None
Weissman, N. ... Edwards (4); Sorin/Carbomedics (4); Medtronic/ATS (4);
Abbott Vascular (4); St. Jude Medical (4); MitralAlign (4)
Weyman, A. ............................................................. None
Wiegers, S. ......................................................... Merck (3); Merck (5)
Wiener, D. ............................................................... None
Wilansky, S. .............................................................. None
Williams, C. .............................................................. None
Woo, A. ................................................................. None
Wood, M. ............................................................... None
Wu, J. ................................................................. None
Wysokinski, W. ....................................................... None
Xie, M. ................................................................. None
Yamat, M. .............................................................. None
Yared, K. ............................................................... None
Yoshida, K. .............................................................. None
Zamorano, J. ............................................................ None
Zeng, X. ................................................................. None
Zhang, Y. ............................................................... None
Zhu, T. ................................................................. None
Zimmerman, K. ....................................................... None
Zoghbi, W. .............................................................. None
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