



ASE 2013

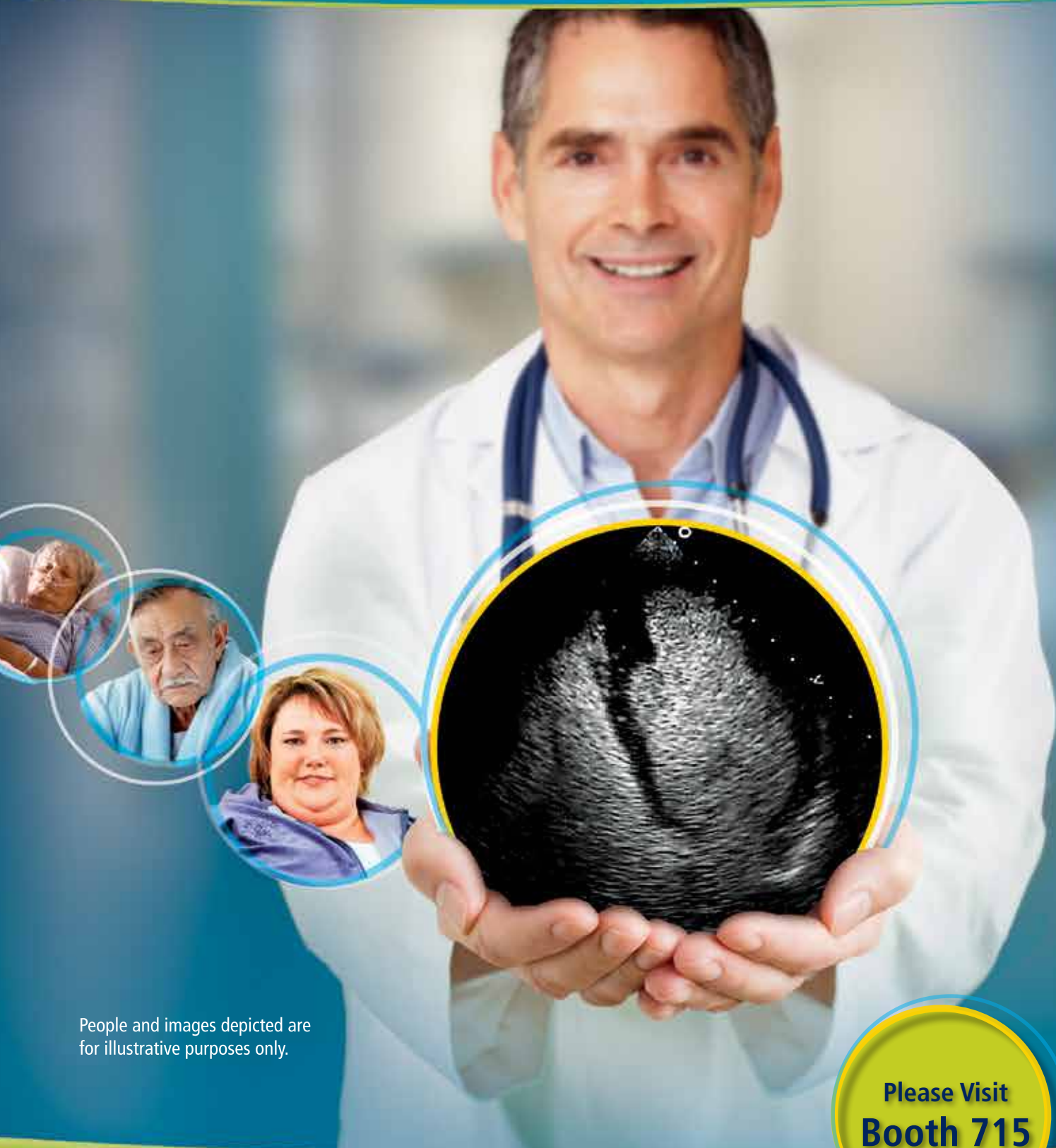
AMERICAN SOCIETY OF
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FINAL PROGRAM

24TH ANNUAL Scientific Sessions • June 29 - July 2, 2013
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Across a variety of patient types with suboptimal echoes and multiple clinical settings...



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DEFINITY 
VIAL FOR (Perflutren Lipid Microsphere)
INJECTABLE SUSPENSION

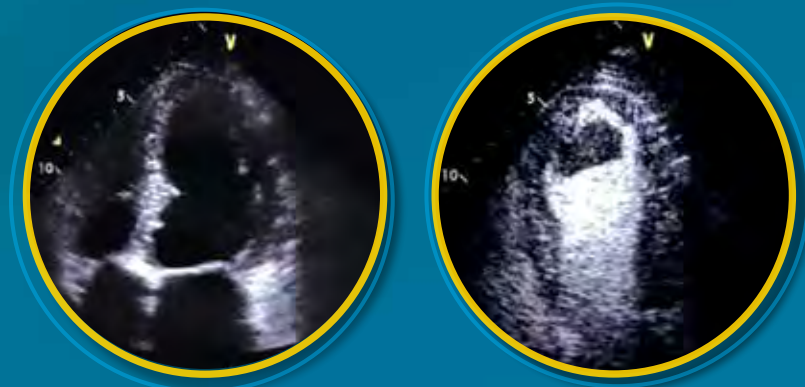
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A DEFINITY® echo— Giving You a Diagnostic Advantage in Suboptimal Echoes for Improved Patient Management^{1,2}

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

- Significantly increases the percentage of evaluable segments, indicating a consistent diagnostic advantage¹
- Enhances the quality of suboptimal echoes, which may result in more accurate and efficient diagnosis¹
- Results in important alterations in medical management and avoidance of additional diagnostic procedures¹

DEFINITY® has a proven safety profile²⁻⁴ and
has been used in more than 4 million patients.⁵



Baseline Echo

DEFINITY® Echo

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

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

INDICATIONS

Activated DEFINITY® (Perflutren 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 perflutren.

IMPORTANT SAFETY INFORMATION

WARNING: Serious Cardiopulmonary Reactions

Serious cardiopulmonary reactions, including fatalities, have occurred uncommonly during or following perflutren-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 perflutren-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.

References: 1. Kurt M, Shaikh KA, Peterson L, et al. Impact of contrast echocardiography on evaluation of ventricular function and clinical management in a large prospective cohort. *J Am Coll Cardiol*. 2009;53(9):802-810. 2. Kitzman DW, Goldman ME, Gillam LD, Cohen JL, Aurigemma GP, Göttiener JS. Efficacy and safety of the novel ultrasound contrast agent perflutren (Definity) in patients with suboptimal baseline left ventricular echocardiographic images. *Am J Cardiol*. 2000;86(6):669-674. 3. Data on file, Lantheus Medical Imaging, Inc. 4. Nucifora G, Marsan NA, Siebelink H-M J, et al. Safety of contrast-enhanced echocardiography within 24 h after acute myocardial infarction. *Eur J Echocardiogr*. 2008;9(6):816-818. 5. ©2001-2012 AMR/Arlington Medical Resources, LLC all rights reserved. Reproduction, distribution, transmission or publication is prohibited. Reprinted with permission.

DEFINITY[®]

VIAL FOR (Perflutren Lipid Microsphere)
INJECTABLE SUSPENSION

FOR INTRAVENOUS USE

BRIEF SUMMARY

Please See Full Prescribing Information available at www.definityimaging.com for additional information.

WARNING: 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.

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, hypertonic liquid, which upon activation with the aid of a VIALMIX[®], 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 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,
- 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 shortly following perflutren-containing microsphere administration, typically within 30 minutes of administration. The risk for these reactions may be increased among patients with unstable cardiopulmonary conditions (acute myocardial infarction, acute coronary artery syndromes, worsening or unstable congestive heart failure, or serious ventricular arrhythmias). Always have cardiopulmonary resuscitation personnel and equipment readily available prior to DEFINITY[®] administration and monitor all patients for acute reactions.

The reported reactions include: fatal cardiac or respiratory arrest, shock, syncope, symptomatic arrhythmias (atrial fibrillation, tachycardia, bradycardia, supraventricular tachycardia, ventricular fibrillation, ventricular tachycardia), hypertension, hypotension, dyspnea, hypoxia, chest pain, respiratory distress, stridor, wheezing, loss of consciousness, and convulsions [see ADVERSE REACTIONS].

Anaphylactoid Reactions:

In postmarketing use, uncommon but serious anaphylactoid reactions were observed during or shortly following perflutren-containing microsphere administration including:

Shock, hypersensitivity, bronchospasm, throat tightness, angioedema, edema (pharyngeal, palatal, mouth, peripheral, localized), swelling (face, eye, lip, tongue, upper airway), facial hypoesthesia, rash, urticaria, pruritus, flushing, and erythema have occurred in patients with no prior exposure to perflutren-containing microsphere products [see ADVERSE REACTIONS].

Systemic Embolization of DEFINITY[®] in Patients with Cardiac Shunts:

In patients with right-to-left, bi-directional, or transient right-

to-left cardiac shunts phospholipid-encapsulated microspheres can bypass the pulmonary particle-filtering mechanisms and directly enter the arterial circulation resulting in microvascular occlusion and ischemia. In an animal study utilizing intra-arterial administration of activated DEFINITY[®], microsphere trapping was seen in small arterioles <15 µm, especially at branch points and in capillaries at all doses tested, including doses directly applicable to those used in humans. An animal study utilizing intravenous administration did not result in arterial microvascular obstruction presumably because of filtering by the lungs. Do not administer DEFINITY[®] by intra-arterial injection [see CONTRAINDICATIONS].

High Ultrasound Mechanical Index:

High ultrasound mechanical index values may cause microsphere cavitation or rupture and lead to ventricular arrhythmias. Additionally, end-systolic triggering with high mechanical indices has been reported to cause ventricular arrhythmias. The safety of activated DEFINITY[®] at mechanical indices greater than 0.8 has not been evaluated [see DOSAGE AND ADMINISTRATION]. The safety of activated DEFINITY[®] with the use of end-systolic triggering has not been evaluated.

QTc Prolongation:

ECG parameters for doses up to 10 microL/kg were monitored in 221 subjects at multiple time points from 1 hour to 72 hours after the first bolus injection. In the 221 subjects, QTc prolongations of >30 msec were noted in 64 (29%) subjects. Forty-six out of 64 subjects with QTc prolongations were further evaluated and 39% (18/46) showed associated cardiac rhythm changes. The effects of concomitant drugs were not studied.

ADVERSE REACTIONS

Clinical Trials Experience

A total of 1716 subjects were evaluated in pre-market 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, 144 (8.4%) 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 activated 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 41.5 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 all racial or ethnic groups, and similar for bolus and infusion dosing. Table 6.1 summarizes the most common adverse reactions.

Table 6.1. New-Onset Adverse Reactions Occurring in ≥0.5% of All Activated DEFINITY[®]-Treated Subjects

	All activated DEFINITY [®] (N=1716)	
Total Number of Adverse Reactions	269	
Total Number of Subjects with an Adverse Reaction	144	(8.4%)
Body system		
Preferred term	n	(%)
Application Site Disorders	11	(0.6)
Injection Site Reactions	11	(0.6)
Body as a Whole	41	(2.4)
Back/renal pain	20	(1.2)
Chest pain	13	(0.8)

(Table 6.1 Cont'd)	All activated DEFINITY [®] (N=1716)	
Central and peripheral nervous system disorder	54	(3.1)
Headache	40	(2.3)
Dizziness	11	(0.6)
Gastrointestinal system	31	(1.8)
Nausea	17	(1.0)
Vascular (extracardiac) disorders	19	(1.1)
Flushing	19	(1.1)

N=Sample size 1716 subjects who received activated DEFINITY[®]

n=Number of subjects reporting at least one Adverse Reaction

Other adverse reactions that occurred in ≤0.5% of the activated DEFINITY[®]-dosed subjects were:

Body as a Whole: Fatigue, fever, hot flushes, pain, rigors, and syncope

Cardiovascular: Abnormal ECGs, bradycardia, tachycardia, palpitation, hypertension and hypotension

Digestive: Dyspepsia, dry mouth, tongue disorder, toothache, abdominal pain, diarrhea and vomiting

Hematology: Granulocytosis, leukocytosis, leukopenia, and eosinophilia

Musculoskeletal: Arthralgia

Nervous System: Leg cramps, hypertonia, vertigo and paresthesia

Platelet, Bleeding, and Clotting: Hematoma

Respiratory: Coughing, hypoxia, pharyngitis, rhinitis and dyspnea

Special Senses: Decreased hearing, conjunctivitis, abnormal vision and taste perversion

Skin: Pruritus, rash, erythematous rash, urticaria, increased sweating, and dry skin

Urinary: Albuminuria

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.

Fatal cardiopulmonary and anaphylactoid events and other serious but non-fatal adverse reactions were uncommonly reported. These events typically occurred within 30 minutes of DEFINITY[®] administration. These serious events may be increased among patients with unstable cardiopulmonary conditions (acute myocardial infarction, acute coronary artery syndromes, worsening or unstable congestive heart failure, or serious ventricular arrhythmias [see WARNINGS AND PRECAUTIONS]).

Reported reactions included:

Cardiopulmonary

Fatal cardiac or respiratory arrest, shock, syncope, symptomatic arrhythmias (atrial fibrillation, tachycardia, bradycardia, supraventricular tachycardia, ventricular fibrillation, ventricular tachycardia), hypertension, hypotension, dyspnea, hypoxia, chest pain, respiratory distress, stridor, wheezing.

Anaphylactoid

Anaphylactic/anaphylactoid reaction, anaphylactic shock, hypersensitivity, bronchospasm, throat tightness, angioedema, edema (pharyngeal, palatal, mouth, peripheral, localized), swelling (face, eye, lip, tongue, upper airway), facial hypoesthesia, rash, urticaria, pruritus, flushing, erythema.

Neurologic

Coma, loss of consciousness, convulsion, seizure, transient ischemic attack, agitation, tremor, vision blurred, dizziness, headache, fatigue.

OVERDOSAGE

The clinical consequences of overdosing with activated

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].

DOSAGE 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 microliters (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 microliters (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 3.4 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 Intellipin™ (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.
- For single use only: DEFINITY® does not contain bacterial preservative. Bacterial contamination with the risk of post-administration septicemia can occur following the puncture

of the elastomeric septum. It is essential to follow directions for activation of DEFINITY® carefully and to adhere to strict aseptic procedures during preparation.

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).

FOR SINGLE USE ONLY: DEFINITY® does not contain bacterial preservative. Bacterial contamination with the risk of post-administration septicemia can occur following the puncture of the elastomeric septum. It is essential to follow directions for activation of DEFINITY® carefully and to adhere to strict aseptic procedures during preparation.

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].

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social networking platform for all ASE members • Professional

Liability Insurance for sonographers • Mobile Membership

through Connect@ASE • Advanced Practice Sonographer

Program • ASE Smartphone apps • Discounts on ASE

educational products • Teaching slide sets

• Opportunity to become a Fellow of the

American Society of Echocardiography

(FASE) • Resume posting and

job searching through

ASEMarketPlace

• Special interest

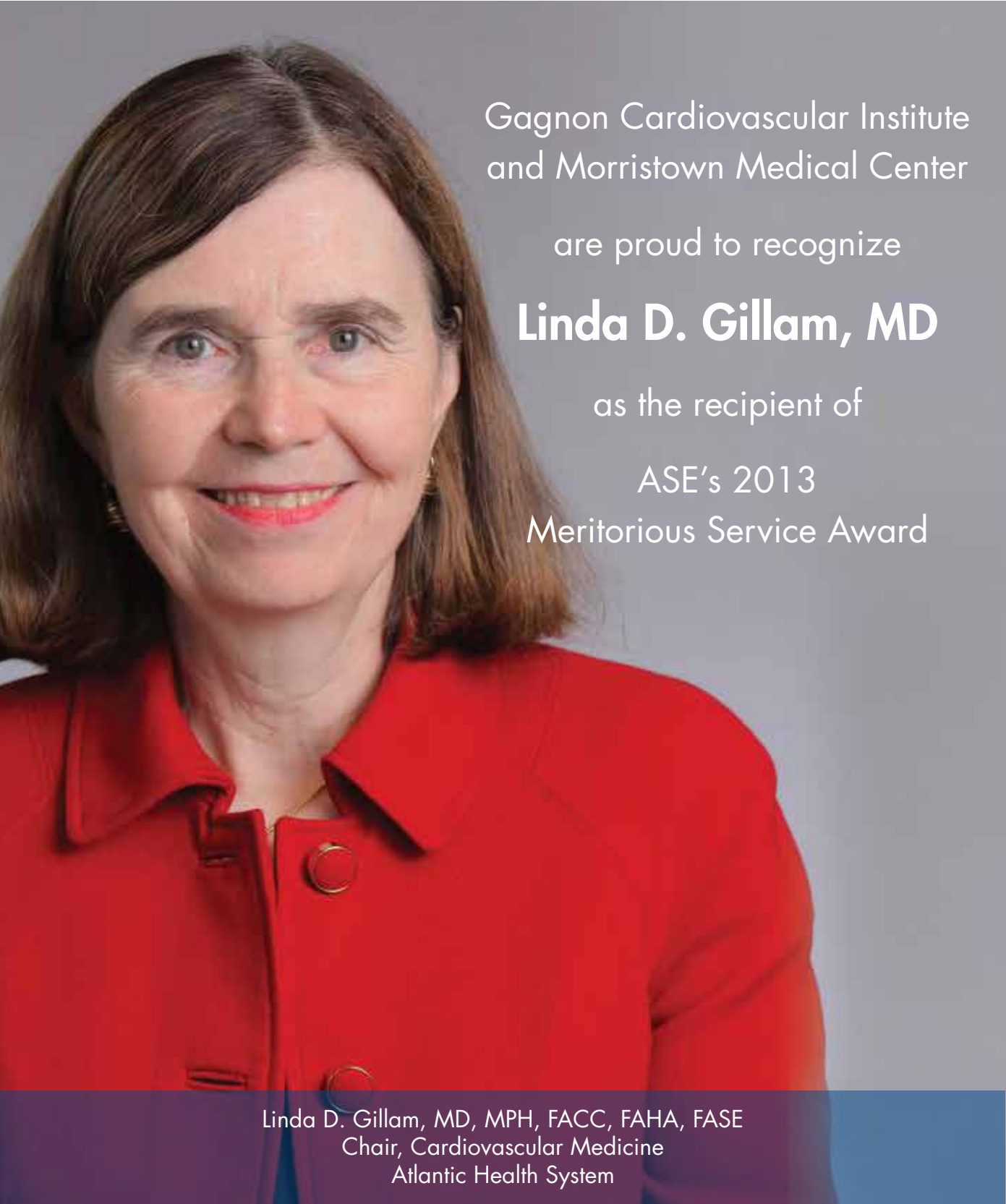
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WELCOME MESSAGE

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

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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REGISTRATION, BADGE & TICKET DISTRIBUTION

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 namebadge 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

FASE LOUNGE

Saturday, June 29 – Monday, July 1: 9:30 am – 4:00 pm
Tuesday, July 2: 9:30 am – 2:00 pm Room 205 BC

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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

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

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

Research Committee

2:00 pm – 4:00 pm
Room 200C

Industry Roundtable Committee Meeting

3:00 pm – 5:00 pm
Room 200D

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

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- Preeta S. Dhanantwari, MD, FASE
- Susan E. Dillon, RDCS, FASE
- Girish Dwivedi, MBBS, MD, MRCP (UK), DM, PhD, FASE
- Kody KA El-Mohtar, MD, FASE
- Amanda J. Etes, BS, RDCS, FASE
- Steven Alan Farmer, MD, PhD, FASE
- Reza Fazel, MD, MSc, FASE
- Sarah E. Fleming, RT(R), RDMS, RDCS, FASE
- Michael C. Foster, RCS, RDCS, FASE
- Ruchira Garg, MD, FASE
- Reyhan A. Ghany, MD, FASE
- Naomi Hamburg, MD, FASE
- Cathryn A. Harris, RDCS (AE), FASE
- Shobha R. Hiremagalur, MD, FASE
- Steven J. Horn, MD, FASE
- Vinay R. Hosmane, MD, MPH, FASE
- Zakir Hossain, MBBS, MPH, RDMS, RCS, RVS, FASE
- Annika S. Illum, MD, FASE
- Rajesh Janardhanan, MD, MRCP, FASE
- Kristie Jo Johnson, RDCS, RCP, RRT, FASE
- Christopher J. Kramer, RDCS, FASE
- Damon M. Kwan, MD, FASE
- Ruby A. Lara, RDCS (PE,FE), FASE
- Thelma K. Lasko, RT, RDCS (AE, PE), FASE
- William John Lauer, MD, FASE
- Sheldon E. Litwin, MD, FASE
- Shizhen Liu, MD, PhD, RDCS, FASE
- Mudassir I. Malik, MD, FASE
- Walter E. Mashman, MD, FASE
- Shaji C. Menon, MD, FASE
- Karim Merali-Murji, MD, RPVI, RDCS, RDMS, FASE
- Rene Morrow-Angeles, BSHA, RCS, FASE
- Lauren C. Motola, BS, RDCS, FASE
- Jennifer H. Neary, RDCS, FASE
- Alexander Ng, MB, ChB, MD, FASE
- Alina Nicoara, MD, FASE
- Lois Orr, RDCS, FASE
- David Pacheco, RDCS (AE,PE), FASE
- Pankaj V. Parikh, BS, MBA, RT, RDMS, RDCS, RCS, RVS, FASE
- Margo G. Paul, RDCS, FASE
- Vasum Peiris, MD, MPH, FASE
- James Pemberton, MD, FASE
- Maria Alexandra Pernetz, RDCS, RVT, FASE
- Sabrina D. Phillips, MD, FASE
- Charlene Michelle Porcelli, RDCS, RDMS, FASE
- Beth Puha, RN, RDCS, FASE
- Vijay U. Rao, MD, PhD, FASE
- Pingle S. Reddy, MD, FASE
- Lyna Farid El-Khoury Rumbarger, RDCS, FASE
- Fadi A. Saab, MD, FASE
- Vandana Sachdev, MD, FASE
- Gonzalo Martin Saravi, MD, FASE
- Radha J. Sarma, MBBS, FASE
- Kamran Ahmed Shaikh, MD, FASE
- Demetrios Andreas Sirounis, MD, FRCP, FASE
- Michael R. Smith, MD, FASE
- Brian D. Soriano, MD, FASE
- David M. Strasser, MD, FASE
- Angela K. Sullivan, RCS, CCT, FASE
- Brandon J. Sullivan, BS, RDCS, RCS, FASE
- Christine Ngukhoon Tan, FRCA, FFICM, FASE
- Hidekazu Tanaka, MD, PhD, FASE
- Kenneth G. Taylor, MD, FASE
- Stephen F. Tucker, RDCS, FASE
- Samuel Unzek, MD, FASE
- Jeffrey R. Uzzilia, MD, FASE
- Bonnie L. Wright, RDCS (AE,PE), FASE
- Mingxing Xie, MD, PhD, FASE
- Hosam A. Zaky, MD, FASE
- Joshua M. Zimmerman, MD, FASE

VISIT THE FASE LOUNGE!

Saturday, June 29 – Monday, July 1: 9:30 am – 4:00 pm

Tuesday, July 2: 9:30 am – 2:00 pm Room 205 BC

Enjoy the benefits of being a Fellow of the American Society of Echocardiography (FASE) at the exclusive FASE Lounge, conveniently located near the Speaker Ready Room. Come and pick up your FASE ribbon to show your dedication to your field and your prestigious designation. Lounge amenities will allow you to connect with friends, grab some refreshments, and take a break from the hustle and bustle of the day while being close to all the sessions.

FACILITY INFORMATION

MINNEAPOLIS CONVENTION CENTER'S PHYSICAL ADDRESS IS:

1301 Second Avenue South
Minneapolis, MN 55403

Parking at the Minneapolis Convention Center

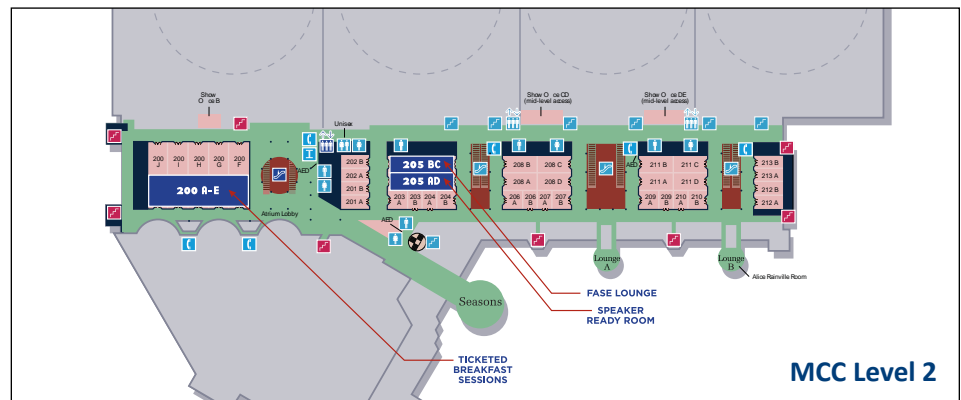
Parking is easy to find at the conveniently located Minneapolis Convention Center. Across the street from the MCC is an underground ramp that is connected by a climate-controlled skyway system to the MCC and several downtown accommodations and attractions. Within easy walking distance of the MCC there are a dozen parking ramps, most connected to the MCC by skyway.

Public transportation

Downtown Minneapolis is compact and easy to navigate. The airport is a mere 15-minute cab ride away. From the expansive public transportation system to its unique skyway system, you'll find Minneapolis a joy to get around. Buses and taxis are readily available at the MCC, the airport, Mall of America and at most hotels.

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.



First Aid

An emergency medical professional will be available during the hours of the ASE 2013 meeting, as well as during set-up and break down of the entire event. In the event of a medical emergency, please find a staff member or security guard to call the nurse on duty.

Lost & Found

Questions regarding lost or found items can be directed to the ASE Registration Counter located in the convention center foyer.

Luggage Storage

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

GENERAL INFORMATION & REGULATIONS

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:

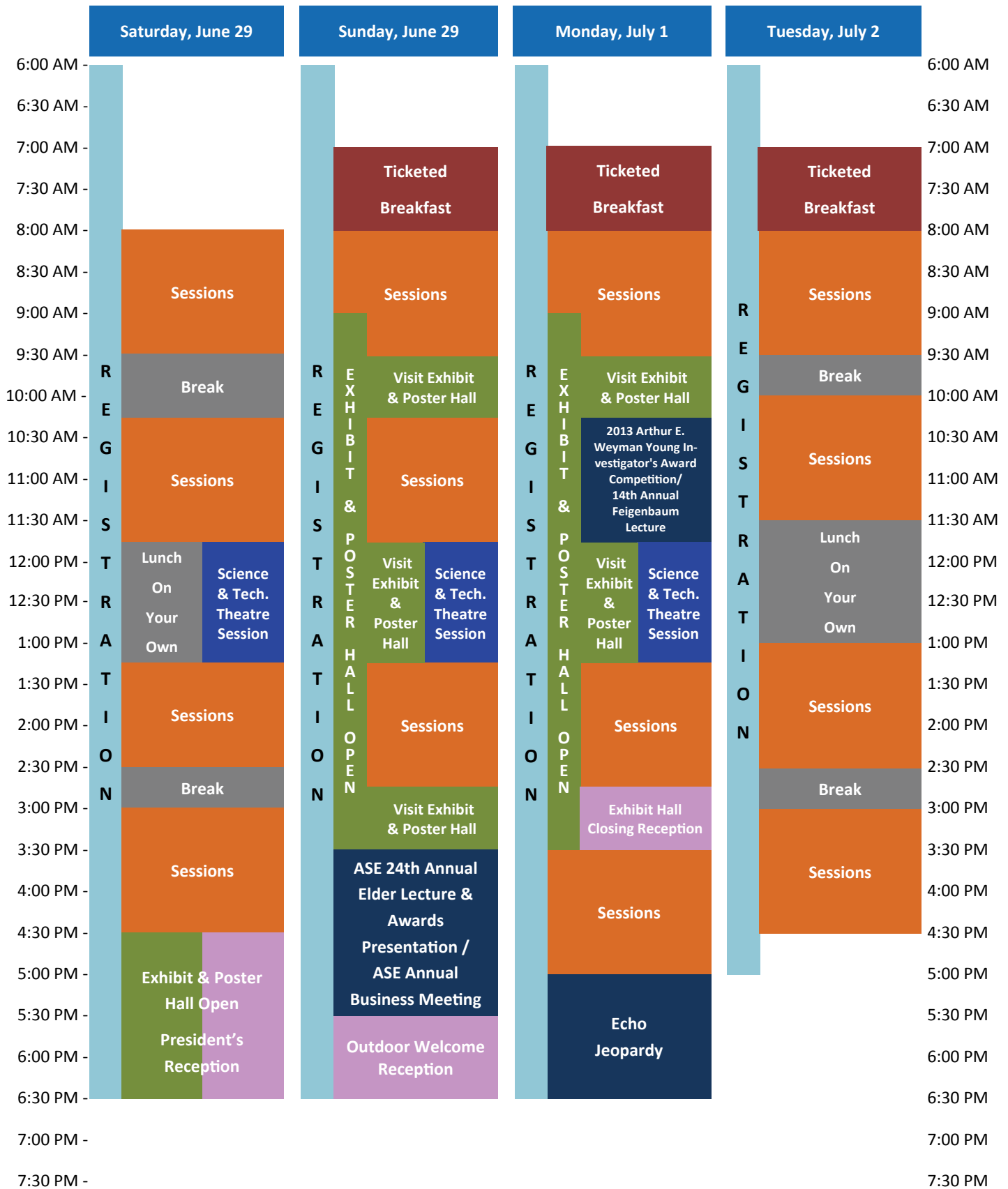
- ▶ iASE
- ▶ ASE Mobile Membership app
- ▶ ASE Pocket Guidelines app



Visit www.ASEMarketPlace.com for a full listing of ASE products and career opportunities.

FULL CONFERENCE-AT-GLANCE

PROGRAM



EDUCATION INFORMATION

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.

EDUCATION INFORMATION

Conference 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, intra-procedural, 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.

NETWORKING OPPORTUNITIES & SPECIAL EVENTS

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:



GE Healthcare

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.

NETWORKING OPPORTUNITIES & SPECIAL EVENTS

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.



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

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”.**

SPECIAL AWARDS

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.

Dr. Seward has conducted pioneering work in nearly all areas of echocardiography including 2-D, multiplane imaging, hand-held echocardiography, and intracardiac and intravascular ultrasound. More than 20 years ago, he developed transvascular ultrasound catheters and navigation systems.

He has served as the mentor to numerous individuals who have made echocardiography their passion and who have built their careers around. Dr. Seward epitomizes excellence in the field of echocardiography.



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.

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

SPECIAL AWARDS

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 Bhatia, 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, BAppSc, 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”

ULTRAECHE, 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**, UWMC 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.

SPECIAL AWARDS

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.

SCIENTIFIC PROGRAM TRACKS AND KEY

SYMPOSIA **S**

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/INTERVENTIONAL **I**

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.

PRACTICE **PR**

There are ongoing rapid changes in the health care delivery system that affect the practice of cardiology and cardiovascular imaging. These sessions will help attendees gain knowledge about these developments and learn strategies for having a successful practice. Topics that will be covered include strategic planning, building the successful practice, and communication skills. The sessions will also address the role of echocardiography in the successful practice. The presentations are geared not only to cardiologists but also to practice administrators and hospital and physician executives with plenty of time for audience interaction with the panel of presenters.

PEDIATRIC/CONGENITAL **PC**

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.

RESEARCH **R**

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.

IMAGING ESSENTIALS **E**

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.

SCIENTIFIC PROGRAM TRACKS AND KEY

VASCULAR IMAGING

V

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.

CARDIOVASCULAR SONOGRAPHER

CS

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

TICKETED BREAKFAST

TB

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

SATURDAY, JUNE 29 SCHEDULE

7:00 am - 8:00 am

CS **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

CS **E** **Imaging Essentials: The Exam** - Lecture Hall 1
Moderators: J. Perez, K. Horton

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 *P. Marshall*

9:15 am - 9:30 am

Imaging the Technically Difficult Patient: Contrast - When & How *T. Belcik*

8:00 am - 9:30 am

I **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, Resist *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

PC **Atrial Septal Defects** - Ballroom A
Moderators: W. Border, M. Brook

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

S **Beyond Lub Dub: The Nitty Gritty of Heart Mechanics (Joint ASE/EACVI Session)** - Lecture Hall 2
Moderators: R. Lang, L. Badano

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

S **Getting Your Fill of Diastology** - Basics - Ballroom B
Moderators: G. Aurigemma, J. Hung

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

SATURDAY, JUNE 29

SCHEDULE

10:00 am - 11:30 am

CS E **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

I **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

PC **Functionally Single Ventricles** - Ballroom A Modertators: *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

S **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

S **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

CS E **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*

SATURDAY, JUNE 29

SCHEDULE

1:00 pm - 2:30 pm

I **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

PC **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

S **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

S **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

CS **E** **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

I **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*

SATURDAY, JUNE 29 SCHEDULE

3:00 pm - 4:30 pm

S **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. Wieggers*

4:00 pm - 4:15 pm

3D Quantitation: When to Use? *L. Sugeng*

4:15 pm - 4:30 pm

Destressing About Strain *T. Koliass*

S 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

PC **Council Meeting Pediatric and Congenital Heart Disease and Awards Presentation** - Ballroom A

3:30 pm - 4:30 pm

PC **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

I **Council on Perioperative Echocardiography Business Meeting and Award Presentations** - Main Auditorium
Moderator: S. Reeves

 **ASE** Foundation

2013 ANNUAL APPEAL Making a WORLD of Difference



SUPPORTING

Research Awards • Guideline-based Projects to Standardize Patient Care • Student and Fellow Travel Grants and Scholarships • Humanitarian Missions to Serve Populations in Need

It's back...

REGO! SOCIETY & Hospital
COMPETITION

Compete for prizes by donating to the ASE Foundation. **NEW THIS YEAR**, participate as a group in the **Fun Run for Echo 5K/1 mile Walk** at the 2013 Scientific Sessions to **Double the Fun and Double your Funds!**



For more information about the Foundation and the Competition please visit us online at www.asefoundation.org

GET GEARED UP THIS WEEKEND!

Fun Run for Echo 5K/1 mile Walk

Co-sponsored by Siemens, IAC, ARDMS and ASE

Sunday, June 30 at 6:00 am

Register at www.regonline.com/runforecho2 or on-site the morning of the race.

SAVE THE DATE

ASE Foundation's 5th Annual Awards Gala

a Silver Ball honoring

ASE's 25th Annual Scientific Sessions

and the 2014 ASE Award Winners

June 21, 2014 | The Nines | Portland, OR

Tickets will be available for purchase in January 2014.

SUNDAY, JUNE 30 SCHEDULE

7:00 am - 8:00 am

Constrictive, Restrictive, and Effusive-Constrictive

TB **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

TB **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

TB **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

TB **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

TB **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

E **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

PC **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

S **Aortic Stenosis** - Main Auditorium
Moderators: *C. Otto, M. Picard*

8:00 am - 8:15 am

Biology of AS and Disease Progression *C. Otto*

SUNDAY, JUNE 30

SCHEDULE

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

S 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

S 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

E 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

PC 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 Regurgitation 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

S 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

The Fontan: History and Current State of Art- Who Gets One? *K. Stout*

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

S Echo in Afib - Lecture Hall 2

Moderators: N. Pandian, B. Hoit

10:15 am - 10:35 am

Role of Imaging in Afib *R. Asinger*

10:35 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*

SUNDAY, JUNE 30 SCHEDULE

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

S I **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

E **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

PC **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

S I **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

S **Pericardial Disease** - Ballroom B

Moderators: J. Kisslo, J. Mangion

1:15 pm - 1:30 pm

Anatomy and Physiology Pericardium: What Lines on the Echo

Go With What Layers? *J. Mangion*

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

Cases: Echo Guided Pericardiocentesis- How, What and Who?

R. Grimm

2:30 pm - 2:45 pm

Question and Answer

1:15 pm - 2:45 pm

S **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

S 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

CS **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

TB **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

TB **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

TB **Case Studies in Advanced LV Mechanics - Twist, Torsion, Strain** - 200 B (Ticket Required for Admission) *Moderator: R. Weiner*

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

TB **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

TB **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

V **Council on Vascular Ultrasound Business Meeting** - Lecture Hall 1

8:00 am - 9:30 am

V **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

PC **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

S **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

S **Takotsubo'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

8:00 am - 9:30 am

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

8:00 am - 8:15 am

Organic Mitral 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

Mitral 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*

R **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

PC **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

S **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

S **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

S **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

V **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 - 2:45 pm

Question and Answer

3:30 pm - 5:00 pm

PC **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

R **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

MONDAY, JULY 1 SCHEDULE

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

S **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

S **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 **PC Fireside Chat:** Jeffrey Smallhorn - Ballroom A
Moderators: J. Smallhorn, L. Mertens

S 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

TUESDAY, JULY 2 SCHEDULE

7:00 am - 8:00 am

Aortic Trauma: Dissection, Intramural Hematoma,

TB **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*

7:30 am - 7:45 am

Case 2 *H. Michelena*

7:45 am - 8:00 am

Case 3 *J. Cavalcante*

7:00 am - 8:00 am

TB **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. Dellling*

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

TB **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

TB **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

TB **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

E **Imaging Essentials: IAC Accreditation and Lab Operations**
- Lecture Hall 1
Moderators: *R. Stainback, E. Nemeč*

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*

S PC SPECIAL EVENT 8:00 AM - 9:30 AM

Live Scanning: Segmental Anatomy

(Joint Pediatric / Adult Session) - Ballroom A

Live Scanning of Congenital Patients *J. Kreeger, S. Phillips, M. King*

8:00 am - 8:45 am

Adult D-TGA *S. Phillips, J. Kreeger*

8:45 am - 9:30 am

L-TGA *M. King, J. Kreeger*

S 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

Low Flow Low Gradient AS With Reserved LVEF ? Does it Exist?
Does AVR Help? *P. Pibarot VS. G. Habib*

9:00 am - 9:30 am

Echo Should be Done in Screening for Athletes *T. Abraham VS. P. Rahko*

TUESDAY, JULY 2 SCHEDULE

8:00 am - 9:30 am

S R **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

E **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

PC R **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

S 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

10:00 am - 11:30 am

S **Pregnancy and Heart Disease: Case-Based Discussion** - Ballroom B
Moderators: S. Siu, K. Dummer

10:00 am - 10:20 am

Stenotic Lesions and Pregnancy A. Poppas

10:20 am - 10:40 am

Regurgitant Lesions and Pregnancy S. Phillips

10:40 am - 11:00 am

Cardiomyopathy and Pregnancy: Peripartum and Hypertrophic CMP F. Chaudhry

11:00 am - 11:20 am

Cyanotic CHD: Who is at Risk S. Siu

11:20 am - 11:30 am

Case S. Sengupta

PR 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

PC **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*

1:00 pm - 2:30 pm

S **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

S 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*

3:00 pm - 4:30 pm

PR **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

3:00 pm - 4:30 pm

PC **Pulmonary Hypertension: Joint Pediatric Adult Session** - Ballroom A
Moderators: P. Barker, G. Ensing

3:00 pm - 3:20 pm

Ventricular-Vascular Interactions in PHT - What Causes the RV to Fail? *K. Hunter*

3:20 pm - 3:40 pm

Assessment of the Right Ventricle in Idiopathic PHT *G. Kane*

3:40 pm - 4:00 pm

Eisenmenger's Physiology: Can We Do Anything in 2013? *A. Bhatt*

4:00 pm - 4:20 pm

Assessment of RV Function in Eisenmenger Syndrome: What is Different? *M. Friedberg*

4:20 pm - 4:30 pm

Question and Answer

3:00 pm - 4:30 pm

S **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

S **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 Epi-aortic 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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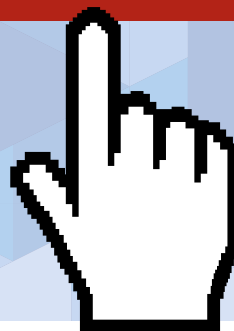
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ORIGINAL SCIENCE & CLINICAL CASES PRESENTATION SCHEDULE

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 DiseaseSIA-1 and SIA-4
Doppler and Strain EchocardiographySIA-2
Echocardiography in Systemic Disease:
Diabetes Mellitus, Hypertension, Obesity, CancerSIA-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 EchocardiographyYIA-1
Vascular DiseaseYIA-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 DiseasePC-01 through PC-06

2013 ABSTRACT GRADERS

ASE sincerely thanks the following volunteers for their time reviewing this year's original science and clinical case submissions.

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M. Lowell Edwards Professor of Cardiology, Oregon Health & Science University, Portland, OR

Abstract Co-Chair:

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New York Presbyterian Hospital/Columbia University Medical Center, New York, NY
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AWARD COMPETITIONS & WINNERS

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. Mazgalev, 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 Hulse. 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

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.

AWARD COMPETITIONS & WINNERS

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 Abuhamad¹. 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

Joshua G. Fosland, Paul M. Bastiansen, Abby L. Biers, Leslie A. Elvert, Nicholas J. Enger, Kristin W. O'Meara, Paul J. Morrisette, Katie Prell, Stephen F. Tucker, Patricia A. Pellikka, Garvan C. Kane, Joshua A. Finstuen. Mayo Clinic, Rochester, MN
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. Eidem. Mayo Clinic, Rochester, MN
Presented by Rebecca K. Lindquist, RDCS

CLINICAL CASES COMPETITION (CC) Monday, July 1, 2013 - Lecture Hall 1

Presented: 3:30 pm - 5 pm

Topics

Cardiovascular Ultrasound Imaging in Diagnosis, Clinical Decision-Making, and Patient Management.....CC-01 through CC-10

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.

CC-01

Transient and Reversible Acute Severe Mitral Regurgitation With Sudden Apical Tenting of Mitral Leaflets

Jang-Won Son, Chi Young Shim, Hyuk-Jae Chang, Geu-Ru Hong, Moon-Hyung Lee, Jong-Won Ha, Namsik Chung. Cardiology Division, Severance Cardiovascular Hospital, Seoul, Republic of Korea
Presented by Jang-Won Son, MD

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

Impalement 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

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-05

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-06

Doppler Echocardiographic Quantitation of Aortic Regurgitation in a Patient with Left Ventricular Assist Device Inefficiency and Refractory Symptoms

Omar K. Khalique, Sunu Thomas, Ulrich Jorde, Susheel Kodali, Mathew Williams, Rebecca T. Hahn. Columbia University Medical Center, New York, NY
Presented by Omar K. Khalique, MD

CC-07

Diagnostic Role of Echocardiography in Atrio-Esophageal Fistula

Brenda Sedberry, Alicia Armour, Eric J. Velazquez, Zainab Samad. Duke University Medical Center, Durham, NC
Author Disclosures: A. Armour: 1 (Philips Ultrasound); E. Velazquez: 1 (Gilead), 2 (Novartis), 4 (Abbott Vascular, Ikaria)
Presented by Brenda Sedberg, BA, RDCS, RCS

CC-08

Percutaneous Paravalvular Leak Closure and Implantation of a Melody Valve-in-Valve

Robert Kumar, Chad Kliger, Itzhak Kronzon, Carlos E. Ruiz. NSLIJHS - Lenox Hill Hospital, New York, NY
Presented by Robert Kumar, MD

CC-09

Prosthetic Mitral Valve Obstruction: Accurate Diagnosis by 3D-Transesophageal Echocardiography

Rajesh Janardhanan, Kapildeo Lotun, Zain Khalpey, Mary C. Smith, Todd Rutter, Darima Nemanova, Mark J. Friedman. University of Arizona, Tucson, AZ
Presented by Rajesh Janardhanan, MD, MRCP, FASE

AWARD COMPETITIONS & WINNERS

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

PEDIATRIC ORAL ABSTRACTS (PC) Tuesday, July 2, 2013 - Ballroom A

Presented: 10 am - 11:30 am

Research Topics

Pediatric and Adult Congenital

Heart Disease PC-01 through PC-06

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.

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 Khambadkone², 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 Mertens², D. Dunbar Ivy¹, Kendall Hunter³, Mark K. Friedberg².

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

Yan Wang, Brooke T. Davey, Fang Liu, Mark Fogel, Anirban Banerjee. The Children's Hospital of Philadelphia, Philadelphia, PA

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

POSTER SESSION 1 (P1) IN THE EXHIBIT & POSTER HALL

SUNDAY, JUNE 30, 2013

Presented: 9 am - 4 pm

Meet the Investigators: 12 pm - 1 pm

Moderated Poster Session: 12 pm - 1 pm

Faculty: A. Gopal, J. Aragam, X. Zeng, M. Wood, M. Pu, J. Solis-Martin, S. Solomon, L. Rodriguez, B. Hoit

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

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.

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 McAndrew¹, William Stewart⁴, Neil Weissman⁵, Mathew Williams¹, 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; ⁵Medstar Health Research Institute, Washington, DC, DC

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 Svensson², 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; ³Medstar Health Research Institute, Georgetown University,

Washington, DC; ⁴Columbia University Medical Center, New York, NY; 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 Overload 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

Jorge Solis, Ana Gonzalez-Mansilla, Esther Perez-David, Rocio Angulo, Alicia Barrio, Jose Antonio Garcia-Robles, Raquel Prieto, Raquel Yotti, Javier Bermejo, Francisco Fernandez-Aviles. Hospital General Universitario Gregorio Maranon, Madrid, Spain

P1-05 Moderated Poster

Differential Left Ventricular Outflow Tract Remodeling and Dynamics in Aortic Stenosis

Praveen Mehrotra¹, Aidan W. Flynn², Katrijn Jansen², Timothy C. Tan², Gary S. Mak², Xin Zeng², Michael H. Picard², Jonathan Passeri², Judy Hung². 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. Svensson⁴, Howard C. Herrmann⁶, Michael J. Mack⁷, Scott Lim⁸, Vinod H. Thourani⁹, John Webb¹⁰, D. Craig Miller¹¹, Thomas C. McAndrew¹², Susheel K. Kodali², Pamela S. Douglas¹³, Martin B. Leon². ¹Dept. of Medicine, Laval University/ Québec 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, St. Louis, MO; ⁶Hospital of the University of Pennsylvania,

POSTER SESSION 1 (P1) IN THE EXHIBIT & POSTER HALL

Philadelphia, PA; ⁷Medical City Dallas Hospital, Dallas, TX; ⁸University of Virginia, Charlottesville, VA; ⁹Emory University School of Medicine, Atlanta, GA; ¹⁰St. Paul's Hospital/ University of British Columbia, Vancouver, BC, Canada; ¹¹Stanford University, Stanford, CA; ¹²Cardiovascular Research Foundation, New York, NY; ¹³Duke Clinical Research Institute, Durham, NC
Author Disclosures: L. Svensson: 2 (Edwards Lifesciences); H. Herrmann: 4 (Edwards Lifesciences), 2 (Paieon, St. Jude Medical), 3 (Microinterventional Devices); V. Thourani: 2 (Edwards Lifesciences, Sorin Medical, St. Jude Medical); J. Webb: 2 (Edwards Lifesciences); D. Miller: 2 (Abbott Vascular, St. Jude Medical, Medtronic, Edwards Lifesciences); S. Kodali: 2 (Edwards Lifesciences, Thubrikar Aortic Valve, Inc., Medtronic, Paieon Medical, St. Jude Medical); P. Douglas: 4 (Edwards Lifesciences); M. Leon: 2 (Edwards Lifesciences)

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 Booher¹, Antonio Conte², Ella Kazerooni¹, Smita Patel¹, David Bach¹. ¹University of Michigan, Ann Arbor, MI; ²Cedars Sinai Medical Center, Los Angeles, CA

P1-08

Does the Continuity Derived AVA Accurately Reflect Stenosis Severity in Patients with Bicuspid Valves and Dilated Left Ventricular Outflow Tracts?

Miret Habashy-Ibrahim, Robyn Doane, Sherif B. Labib. Lahey Health System, Burlington, MA

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

Author Disclosures: M. Williams: 2 (Edwards Lifesciences); S. Kodali: 2 (Edwards Lifesciences, Medtronic, Thubrikar Aortic Valve, Inc., Paieon Medical, St. Jude Medical); M. Leon: 2 (Edwards Lifesciences, Medtronic Vascular)

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. Levine², Marcia M. Barbosa¹, Vinicius T. Carvalho¹, William A. Esteves¹, Xin Zeng², Timothy C. Tan², Judy Hung². ¹Federal University of Minas Gerais, Belo Horizonte, Brazil; ²Cardiac Ultrasound Lab, Massachusetts General Hospital, Harvard Medical School, 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

Kentaro 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 Goliash¹, Guiseppe Caracciolo¹, Gianni Pedrizzetti¹, Jagat Narula¹, 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

Brianne Hackman¹, Robert A. Levine², Ramachandran S. Vasan³, Warren J. Manning¹, Francesca N. Dellinger¹. 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. Fernandes³, Alexandre Cauduro⁴, Marina Bessel¹, 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

POSTER SESSION 1 (P1) IN THE EXHIBIT & POSTER HALL

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

Author Disclosures: R. Lang: 4 (Philips)

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 Shiota. Cedars-Sinai Medical Center, Los Angeles, CA

Author Disclosures: T. Shiota: 1 (Philips)

P1-25

Myxomatous Mitral Valve Disease Morphological Characteristics: Are There Any Gender Disparities?

Shmuel Schwartzberg¹, 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 Reichel. 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 Nozawa², Shigeyuki Ozaki², Masato Nakamura¹, Kaoru Sugi¹. 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 Yeo, 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 Shimoni². 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

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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

POSTER SESSION 1 (P1) IN THE EXHIBIT & POSTER HALL

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. Freire³, Rodolfo Sharovsky⁴, Marina Bessel¹, Paulo A. Lotufo⁴, Bruce B. Duncan¹. 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 Mowakeaa¹, Aeshita Dwivedi², Scott Kinlay¹, Jason Grossman², 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 Assef¹, 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 Inyangetor¹, Richard Feinn², Christopher Steele¹, Mary Noory¹, 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 Reichel. 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 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

POSTER SESSION 1 (P1) IN THE EXHIBIT & POSTER HALL

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Development of a Multi-Modality MRI Compatible Circulatory Flow System for the Functional Assessment of Mitral Valve Prostheses

Matthew S. Jackson, Stephen R. Igo, Dimitrios Maragiannis, Karen Chen, William A. Zoghbi, Dipan J. Shah, Stephen H. Little. 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. Levine², Timothy C. Tan², Judy Hung².
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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 Banyś², Piotr Podolec¹.
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Ventricular Function P1-51 through P1-100

P1-51 *Moderated Poster*

Differences of Impact by Cardiac Surgery on Mitral Annular Movement Assessed by Tissue Doppler Echocardiography

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

P1-52 *Moderated Poster*

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

P1-53 *Moderated Poster*

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

P1-54 *Moderated Poster*

Temporal Patterns of Diastolic Left Ventricular Strain in Patients with Severe Aortic Stenosis Are Related to Outcomes

Victor Mor-Avi¹, Wendy Tsang¹, Mark Gajjar¹, Benjamin H. Freed¹, Maria Cristina Abduch², Ivan S. Salgo³, Roberto M. Lang¹.
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P1-55

Adverse Cardiac Events and the Impaired Relaxation Filling Pattern

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

P1-59

Longitudinal Study of Right Ventricular Function in Left Ventricular Assist Device Support: A Tale of Two Echo Parameters

James N. Kirkpatrick, Vimal Ramjee, Ted Plappert, Dale Kobrin, Martin G. St. John Sutton, Y. Joseph Woo, Michael A. Acker, J. Eduardo Rame. University of Pennsylvania, Philadelphia, PA

P1-60

Parameters to Assess Pulmonary Vascular Resistance on Right Ventricular Plasticity

Setu Trivedi, Angel Lopez-Candales. University of Cincinnati - College of Medicine, Cincinnati, OH

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Three-Dimensional Modeling of the Right Ventricle from Two-Dimensional Transthoracic Echocardiographic Images: Utility of Knowledge-Based Reconstruction in Pulmonary Arterial Hypertension

Nicole M. Bhave¹, Regina Steringer-Mascherbauer², Amit R. Patel¹, Lynn Weinert¹, Megan Yamat¹, Benjamin H. Freed³, Victor Mor-Avi¹, Mardi Gomberg-Maitland¹, Roberto M. Lang¹, Hans-Joachim Nesser². ¹University of Chicago, Chicago, IL; ²Krankenhaus der Elisabethinen Hospital, Linz, Austria; ³Northwestern Memorial Hospital, Chicago, IL
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P1-62

Relationship between Left Ventricular Diastolic Function and Cardiac Sympathetic Nerve Activity in Heart Failure Patients with Preserved Ejection Fraction

Tetsu Onishi, Hidekazu Tanaka, Yoshiki Yamadori, Mayumi Shigeru, Kensuke Matsumoto, Sei Fujiwara, Hiroya Kawai, Ken-ichi Hirata. Kobe University Graduate School of Medicine, Kobe, Japan

P1-63

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

Koya Ozawa, Nobusada Funabashi, Akihisa Kataoka, Noriyuki Yanagawa, Nobuhiro Tanabe, Koichiro Tatsumi, Yoshio Kobayashi. Chiba University Graduate School of Medicine, Chiba, Japan

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Combined Global Longitudinal Strain and Mechanical Dyssynchrony Predicts Survival in Patients with Systolic Heart Failure

Chun-Li Wang, Yi-Hsin Chan, Chi-Tai Kuo, Yung-Hsin Yeh, Lung-Sheng Wu. Chang Gung Memorial Hospital, Linkou, Taoyuan, Taiwan

P1-65

Effect of Aging and Gender on Tricuspid Annular Motion Velocities and Displacement

Hirotsugu Yamada, Susumu Nishio, Shuji Hayashi, Junko Hotchi, Mika Bando, Yukina Hirata, Tatsuaki Tomofuji, Masataka Sata. Tokushima University Hospital, Tokushima, Japan

P1-66

Three-Dimensional Echocardiography in the Evaluation of Right Ventricular Regional Systolic Function in Patients with Right Heart Pressure Overload

Dehong Kong, Haohua Yao, Cuizhen Pan, Daxin Zhou, Xianhong Shu. Zhongshan Hospital, Fudan University, Shanghai, China

P1-67

Assessment of the Left Ventricular Untwisting in Patients with Acute Myocardial Infarction in Different Location by 2D Speckle Tracking Imaging

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

P1-68

Left Ventricular Diastolic and Right Ventricular Systolic Dysfunctions are Linearly Associated with Troponin Elevations and Account for its Prognostic Effect in Severe Sepsis and Septic Shock

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

P1-69

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 Jain¹, Adel Mohamed¹, Afif El-Khuffash², Robert P. Jankov³, Patrick J. McNamara³, Luc Mertens³. ¹Mount Sinai Hospital, Toronto, ON, Canada; ²The Rotunda Hospital, Dublin, Ireland; ³Hospital for Sick Children, Toronto, ON, Canada

P1-70

Relationship of Clot Burden and Severity of Right Ventricular Dysfunction after Acute Pulmonary Embolism

Ana Clara T. Rodrigues, Laise Guimaraes, Juliana Guimaraes, Claudia Monaco, Adriana Cordovil, Edgar Lira, Marcelo Vieira, Claudio H. Fischer, Cesar Nomura, Samira S. Morhy. Hospital Israelita Albert Einstein, Sao Paulo - SP, Brazil

P1-71

Tissue Doppler Assessment of Systolic Time Velocity Integral at Multiple Sites for Detection of Right Ventricular Systolic Dysfunction

Bryce Lynn, Kruti Joshi, Harvey Feigenbaum, Stephen Sawada. Indiana University School of Medicine, Indianapolis, IN

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Gender Difference in Right Ventricular Systolic and Diastolic Function in Normal Subjects

Takenori Otsuka, Makoto Suzuki, Hisao Yoshikawa, Go Hashimoto, Ai Takeuchi, Youko Ishikawa, Tsukasa Osaki, Kaoru Sugi. Toho University Ohashi Medical Center, Tokyo, Japan

P1-73

Evaluation of Left Ventricular Torsion in Patients with Coronary Heart Disease

Zheng Li, Cuizhen Pan, Xianhong Shu. Zhongshan Hospital, Fudan University, Shanghai, China

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Tissue Velocity Images (TVI) Compared with Gated Myocardial SPECT for Cardiac Dyssynchrony Assessment

Magdalena Kostkiewicz, Agata Lesniak-Sobelga, Piotr Podolec. Jagiellonian University, Hospital John Paul II, Krakow, Poland

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Evaluation of Flow Structure within Left Ventricle in Patients with Chronic Heart Failure by Vector Flow Mapping

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

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Non-Invasive Assessment of Right Ventricular Function in Mice Using Tricuspid Annular Plane Excursion

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

P1-77

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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Comparing Technique Reliability to Measure Right Ventricle Function Using Myocardial Performance Index (MPI) and Tricuspid Annular Plane Systolic Excursion (TAPSE) - 2D/Color Doppler Versus Tissue Doppler Imaging

Amish Jain¹, Afif El-Khuffash², Adel Mohamed¹, Patrick J. Mcnamara³, Luc Mertens³. ¹Mount Sinai Hospital, Toronto, ON, Canada; ²The Rotunda Hospital, Dublin, Ireland; ³Hospital for Sick Children, Toronto, ON, Canada

P1-79

Left Ventricular Untwisting Motion Augments Left Ventricular Diastolic Suction

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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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Association of Ghrelin with Left Ventricular Structure and Function in the General Population

Seong Hwan Kim¹, Goo-Yeong Cho², Inkyung Baik³, Hong Euy Lim⁴, Jin Oh Na⁴, Seong Woo Han⁵, Yong Hyun Kim¹, Chol Shin¹.

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Right Ventricular Function and Remodeling after Balloon Pulmonary Angioplasty in Patients with Chronic Thromboembolic 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, Tetsuaki Onishi, Kensuke Matsumoto, Toshiro Shinke, Noriaki Emoto, Hiroya Kawai, Ken-ichi Hirata. Kobe University Graduate School of Medicine, Kobe, Japan

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Left Ventricular Epicardial Area is a Discriminator of Left Ventricular Mass: Data from the Mind Your Heart Study

Jason A. Talavera¹, Jeff Ho¹, Bryan Ristow¹, 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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Assessment of Left Ventricular Diastolic Function by Transthoracic Echocardiography Following Orthotopic Heart Transplant

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

P1-85

Salutatory Association of Alcohol and Ventricular Function is Limited to Moderate Systolic Dysfunction

Haroon Yousaf¹, Richard J. Rodeheffer², Khawaja Afzal Ammar¹.

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P1-86

Assessment of Impact of Involved Coronary Artery Quantity on Left Ventricular Untwisting in Patients with CHD by 2DSTI

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

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Role of Hand-held Ultrasound in the Assessment of Common Echocardiogram Indications

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

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Peak Systolic Mitral Annular Motion Velocity Reflects the Status of Ventricular-Arterial Coupling: A Clinical Study

Shuji Hayashi, Hirotsugu Yamada, Junko Hotchi, Susumu Nishio, Mika Bando, Yukina Hirata, Masataka Sata. Tokushima University Hospital, Tokushima, Japan

POSTER SESSION 1 (P1) IN THE EXHIBIT & POSTER HALL

- P1-89**
Influence on the Right Ventricular Diastolic Function by Pulmonary Hypertension
Takenori Otsuka, Makoto Suzuki, Hisao Yoshikawa, Go Hashimoto, Ai Takeuchi, Youko Ishikawa, Tsukasa Osaki, Kaoru Sugi. Toho University Ohashi Medical Center, Tokyo, Japan
- 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
Koya Ozawa, Nobusada Funabashi, Akihisa Kataoka, Noriyuki Yanagawa, Nobuhiro Tanabe, Koichiro Tatsumi, Yoshio Kobayashi. Chiba University Graduate School of Medicine, Chiba, Japan
- 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 Klina, 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 Ammar¹. 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. Boramae 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

Contrast Echocardiography and Molecular Imaging P1-101 through P1-117

- P1-101 Moderated Poster**
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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P1-102 Moderated Poster

Improvement in Microvascular Outcome Using Both Image Guided Therapeutic Ultrasound Impulses with a Long Pulse Duration and High Mechanical Index During An Intravenous 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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P1-103

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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Investigation of Microbubble and Ultrasound Mediated Thromboprophylaxis in Porcine Models of Extracardiac Grafts

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

P1-105

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

P1-106

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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Practical Use of Ultrasound Contrast Agents in the Echocardiography Lab

Ambrose Panico, Anoop Agrawal, Atif Bashir, Robert Nierzwicki, 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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Prognostic Utility of Contrast Stress Echocardiography and Stress Electrocardiography in Post-Menopausal Women at Risk for Coronary Artery Disease (SMART) Trial: Outcome at 5 Years

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

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Feasibility of Left Ventricular Strain Assessment Using Velocity Vector Imaging Coupled with Contrast Enhanced Transthoracic Echocardiography in a Venovenous Extra Corporeal Membrane Oxygenation Ovine Model

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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Characterization and Quantification of Aortic Vortex Flow in Normal and Patients with Stroke Using Transesophageal Contrast Echocardiography

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Perflutren Microsphere Contrast Transthoracic Echocardiography Improves Endocardial Definition During Venovenous Extra Corporeal Membrane Oxygenation in a Validated Ovine Model

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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Contrast Echocardiography for Cardiac Assessment in the Presence of Left Ventricular Assist Devices

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Subacute Myocardial Flow Reserve Reduction Detected by Stress Contrast Echocardiography on Microembolization Swine Models with Preserved LVEF

Leilei Cheng, Weipeng Zhao, Yongle Cheng, Wenzhi Pan, Xianhong Shu. Zhongshan Hospital, Fudan University, Shanghai, China

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Saline Contrast Three-Dimensional Echocardiography for the Detection of Intrapulmonary Shunt and Patent Foramen Ovale
Nirmanmoh Bhatia, Mohannad Y. Abushora, Marcus F. Stoddard. University of Louisville, Louisville, KY

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The Value of Echo-contrast RT3DE for Assessment of Left Ventricular Function in Patients with Left Ventricular Non-compaction

Mingxing Xie, Linli Qiu. Union Hospital of Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

Echocardiography in Arrhythmias/ Source of Embolism P1-118 through P1-128

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Transesophageal Echocardiography of Intracardiac Thrombus in Congenital Heart Disease and Atrial Flutter: The Importance of Thorough Examination of the Fontan

Nida Yousef, Supaluck Kanjanathai, Ira Shetty, Vivian Wei Cui, Frank Zimmerman, David A. Roberson. Heart Institute for Children, Advocate Children's Hospital, Oak Lawn, IL
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P1-119 Moderated Poster

Circumferential Mechanical Dispersion Associates with Less Implantable Cardioverter-Defibrillator Therapy in Non-ischemic Cardiomyopathy

Kazuaki Negishi¹, Tomoko Negishi¹, Omeed Zardkoohi¹, Betty Ching¹, Bruce L. Wilkoff¹, Thomas H. Marwick², Zoran B. Popovic¹.
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Persistent Left Atrial Thrombus in Patients with Atrial Fibrillation Despite On-target Warfarin Therapy

Shmuel Schwartzberg, Sarah Tsiaras, Michael H. Picard. Massachusetts General Hospital, Boston, MA

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Contribution of Flow Dynamics to Clot Formation at the Right Atrial/Caval Junction

Burhan Mohamedali¹, Allan Zelinger². ¹UIC, Chicago, IL; ²UIC/ Advocate Christ Medical Center, Chicago/Oak Lawn, IL

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Mechanical Dyssynchrony Predicts Arrhythmia Free Outcomes in Patients With Nonischemic Dilated Cardiomyopathy Treated With Cardiac Resynchronization Therapy

Kristina H. Haugaa, Josef Marek, Keiko Ryo, Mohamed Ahmed, Evan Adelstein, Samir Saba, John Gorcsan, III. University of Pittsburgh, Pittsburgh, PA
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Differential Enlargement in Atrial Size as a Predictor of Atrial Fibrillation Recurrence Post Direct Current Cardioversion in Atrial Fibrillation Patients

Christina Luong¹, Darby Thompson², Matthew Bennett¹, John Jue¹, Kenneth Gin¹, Krishnan Ramanathan¹, Marion Barnes¹, Pamela Colley¹, Teresa S. M. Tsang¹. ¹University of British Columbia, Vancouver, BC, Canada; ²EMMES Canada, Vancouver, BC, Canada

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Intrapulmonary Shunt: The Missing Link in Etiology of Cryptogenic Ischemic Stroke and Transient Ischemic Attack?

Nirmanmoh Bhatia, Mohannad Y. Abushora, Ziad Alnabki, Marcus F. Stoddard. University of Louisville, Louisville, KY

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Utility of Echocardiographic Diastolic Function Assessment in the Detection of Elevated Left Atrial Pressure in Patients with Persistent and Longstanding Persistent Atrial Fibrillation

Maria Kohari, David R. Okada, Larraitz Gaztanaga, Erica Zado, Francis E. Marchlinski, David J. Callans, Yuchi Han. Hospital of the University of Pennsylvania, Philadelphia, PA

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Left Atrial Catheter Ablation for Atrial Fibrillation with Left Atrial Appendage Sludge: Safety and Effectiveness

Takehitto Sasaki, Eiji Yamashita, Rie Sugawara, Naofumi Tsukada, Shigeto Naito. Gunma Prefectural Cardiovascular Center, Maebashi, Japan

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Utility of Stroke Risk Prediction Tools to Detect Transesophageal Echocardiography Derived Surrogate Markers for Stroke

Esosa Odigie-Okon, Prashant Jagtap, Fraij Ghassan, Jean Gue, Rido Cha. Cooper University Hospital, Camden, NJ

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The Association Between Left Atrium and Appendage Thrombus and Duration of Atrial Fibrillation

Roland F. Njoh¹, Bernardo Lombo², Avijit Baidwan¹, Robert MCloughlin¹, Basile Njei³, Raghuraman Vihdun¹, Gregory Buller¹.
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POSTER SESSION 1 (P1) IN THE EXHIBIT & POSTER HALL

Echocardiography in Systemic Disease: Diabetes Mellitus, Hypertension, Obesity, Cancer P1-129 through P1-155

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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. Oeffinger², Emily S. Tonorezos², Roberto Adsuar², Ray Diaz², Elton Mara², Richard M. Steingart², Jennifer E. Liu². 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 Khoufani, Waqas Qureshi, Syed Hassan, Sophia Qureshi. Henry Ford Hospital, Detroit, MI

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

Sunny Jhamnani¹, Ana Barac¹, Hong Wang², Nawar Shara², Mary Roman³, Richard Devereux³, Barbara Howard². 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

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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
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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

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

Tomoko Negishi¹, Kazuaki Negishi¹, Juan Carlos Plana¹, Brian A. Haluska², Thomas H. Marwick³. ¹Cleveland Clinic, Cleveland, OH; ²University of Queensland, Brisbane, Australia; ³Menzies Research Institute Tasmania, Hobart, Australia

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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

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Cardioprotective Effects of Seapolynol (Polyphenol Purified from *Ecklonia cava*) Against Adriamycin-Induced Cardiomyopathy in an Animal Rat Model

Hui Kyung Jeon¹, Dong Hyeon Lee², Ho Joong Youn², Hyeon Cheol Shin³. 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

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Left Heart Chamber Quantification in Obese Patients: Do ASE Guidelines Apply?

Pu Zong¹, Jessica Pena², Cynthia Taub². ¹James J. Peters VA Medical Center, Bronx, NY; ²Montefiore Medical Center, Bronx, NY

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Use of Myocardial Imaging to Select Treatment and Characterize Response in LV Dysfunction

Leah M. Wright¹, Wojciech Kosmala², Christine Jellis³, James Sharman¹, 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

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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. Marwick², Balaji K. Tamarappo¹. ¹Cleveland Clinic, Cleveland, OH; ²Menzies Research Institute Tasmania, Hobart, Australia

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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

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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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Identification of the Differential Geometric Patterns of Left Ventricular Hypertrophy Between Men and Women in Young and Middle-aged Adults with Hypertension

Qiong Zhao, Laura A. Colangelo, Kameswari Maganti, Kiang Liu. Northwestern University, Chicago, IL

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Impact of Dialysis Modality on Left Ventricular Geometry Assessed by Echocardiography in Patients with End Stage Renal Disease

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, Hyoung-Mo Yang, Gyu-Tae Shin, Heung-Soo Kim, Inwheel Park, Kyoung-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 Pellikka², Stephen M Ansell², Steven Cha², Hector R Villarraga². ¹Division of Cardiovascular Diseases, Echocardiography and Hemodynamic Laboratory, Mayo Clinic, Rochester, MN, and Xinqiao Hospital, The Third Military Medical University, Chongqing, China; ²Division of Cardiovascular Diseases, Echocardiography and Hemodynamic 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

Ana Clara T. Rodrigues¹, Marina Roque¹, Ana Lucia Arruda¹, Derly Becker¹, Sergio Barros¹, Fernando Kay², Thais Emerick², Giovanni G. Cerri², Percival Sampaio-Barros³, Jose L. Andrade¹. ¹Echocardiografia-InRAD-HC-FMUSP, Sao Paulo - SP, Brazil; ²InRAD-HC-FMUSP, Sao Paulo - SP, Brazil; ³Reumatologia-HC-FMUSP, Sao Paulo - SP, Brazil

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Left Atrial Volume Index as an Independent Predictor of Exercise Capacity

Nithima Ratanasit, Srisakul Chirakarnjanakorn, Decho Jakrapanichakul, Rungroj Krittayaphong. Siriraj Hospital, Mahidol University, Bangkok, Thailand

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Right Ventricular Systolic Function was Impaired in Patients with Chronic Renal Failure

Minmin Sun, Yu Kang, Cuizhen Pan, Bo Sheng, Xianhong Shu. Zhongshan Hospital, Fudan University, Shanghai, China

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Incidence of Left Ventricular Diastolic Dysfunction in Chronic Pulmonary Arterial Hypertension Patients: A Single Center Echocardiographic Study

Francisco R. Lopez, Jean Elwing, Angel López-Candales. 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 Megalla, Manoj Bhandari, Justin Karl, Harish Patel, Usman Khan, Ahmed Elwan, Yassar Nabeel, Marin Nicu, Narendra Bhalodkar, Jonathan N. Bella. Bronx Lebanon Hospital Center, Bronx, NY

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The Importance of Echocardiographic Dyssynchrony to Patients with Insulin-Dependent Diabetes Mellitus Undergoing Cardiac Resynchronization Therapy

Mohamed Ahmed, Josef Marek, Keiko Ryo, Kristina Haugaa, David Schwartzman, John Gorcsan, III. University of Pittsburgh, Pittsburgh, PA
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Automated Parametric Display for Rapid Assessment of Changes in Left Ventricular Ejection Fraction and Global Longitudinal Strain During Serial Echocardiographic Studies

Gillian Murtagh, Wendy Tsang, Nicole M. Bhavé, Brent DeMayo, Eric Kruse, Megan Yamat, Roberto M. Lang, Jeanne M. DeCara. 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, Alexandra C. L. Sanchez¹, Adenvalva L. S. Beck¹, Marianne L. Silva², Gerson C. Junior². ¹Instituto de Cardiologia do Distrito Federal (ICDF), Brasília, Brazil; ²Universidade de Brasília (UnB), Brasília, Brazil

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Epicardial Adipose Tissue: Predictor of Metabolic Syndrome in the Elderly

Michael Wu¹, Yue Yu¹, Suraj Sookhu¹, John N. Makaryus¹, Farhan Bajwa², Azhar Supariwala², Farooq A. Chaudhry², 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 Stefani, Sr., Ilaria Corsani, Jr., Valentina Di Tante, Jr., Gabriele Innocenti, Jr., Giorgio Galanti, Sr.. Sports Medicine Centre, Florence, Italy

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Impact of Acute Septal Angle on Prediction of Post-induction Hypotension During General Anesthesia

Satoru Fujii¹, Mika Mori², Tsuyoshi Yoshimuta², Tsunehisa Tsubokawa³, Masakazu Yamagishi², Ken Yamamoto³. 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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Outcomes/Quality/ Echocardiography in Clinical Trials P1-156 through P1-184

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Prediction of 30-Day Heart Failure-Specific Readmission Risk by Echocardiographic Parameters

Paaladinesh Thavendiranathan¹, Teerapat Yingchoncharoen², Andrew Grant³, Sinziana Seicean², Steven H. Landers⁴, Eiran Z. Gorodeski², Thomas H. Marwick⁵. 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 Research Institute, Tasmani, Australia

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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

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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 Ananthasubramaniam². ¹University of Pittsburgh, Pittsburgh, PA; ²Henry Ford Hospital, Detroit, MI; ³Seton Healthcare Family Hospitals, Kyle, TX

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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

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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

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Effects of Standardization Training on Inter-institutional Performance of Left Ventricular Volumes Using Three-Dimensional Echocardiography

Wendy Tsang¹, Cliona Kenny², Shaumik Adhya², Stam Kapentanakis², Lynn Weinert¹, Mark Monaghan², Roberto M. Lang¹. ¹University of Chicago Medical Center, Chicago, IL; ²King's College Hospital, London, United Kingdom
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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
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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. Pena². 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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Diagnostic 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
- P1-171**
Improvements in Care Process and Patient Satisfaction with a Standardized Transesophageal Echocardiography Guided Direct Current Cardioversion Protocol
Brandon R. Porten¹, Craig E. Strauss¹, Kevin M. Harris¹, Ross F. Garberich¹, William T. Katsiyiannis¹, Robert E. McKlveen², David G. Hurrell¹. ¹Minneapolis Heart Institute Foundation at Abbott Northwestern Hospital, Minneapolis, MN; ²Northwest Anesthesia, PA, Minneapolis, MN
- P1-172**
Evaluation of Transthoracic Echocardiography Simulator Proficiency by Kinematic Motion Analysis
Han Kim¹, Feroze Mahmood², Remco Bergman³, David O'Halloran², Katie Hawthorne², John Mitchell², Robina Matyal². ¹St. Michael's Hospital, Toronto, ON, Canada; ²Beth Israel Deaconess Medical Center, Boston, MA; ³University Medical Center Groningen, Groningen, Netherlands
- P1-173**
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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- P1-175**
Left Atrial Remodeling and Recurrence of Congestive Heart Failure
Kazuto Yamaguchi, Hiroyuki Yoshitomi, Nobuhide Watanabe, Hiroto Sato, Tomoko Adachi, Saki Ito, 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
Vicente 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, São 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. Garcia¹, Ileana Pena¹, Daniel M. Spevack¹. ¹Montefiore Medical Center, Bronx, NY; ²Jacobi Medical Center, Bronx, NY
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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 Enzevaei¹, Judy Hung², Andrew Day¹, Colleen Londry¹, Anthony Sanfilippo¹, Christine D'Arsigny¹, 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
Yoshiki Motoji, Hidekazu Tanaka, Yuko Fukuda, Keiko Ryo, Takuma Sawa, Yoshiki Yamadori, Junichi Imanishi, Tatsuya Miyoshi, Yasuhide Mochizuki, Mana Hiraishi, Akihiro Kaneko, Kazuhiro Tatsumi, Tetsuori 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
- P1-182**
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

POSTER SESSION 1 (P1) IN THE EXHIBIT & POSTER HALL

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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, Tetsuori Onishi, Kensuke Matsumoto, Noriaki Emoto, Hiroya Kawai, Ken-ichi Hirata. Kobe University Graduate School of Medicine, Kobe, Japan

P1-184

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

Vascular Disease P1-185 through P1-194

P1-185

Semi-automated Detection and Quantification of Aortic Atheromas from Three-Dimensional Transesophageal Echocardiography

Wendy Tsang¹, Concetta Piazzese², Miguel Sotaquira², Itzhak Kronzon³, Enrico Caiani², 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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P1-186

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

P1-187

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. Shakhnovich⁴, Alexey G. Kuzmichev¹, Alexander V. Averyanov². 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. Matangi², Connetta Falkson¹, Amer M. Johri¹. ¹Queen's University, Kingston, ON, Canada; ²Kingston Heart Clinic, Kingston, ON, Canada

P1-189

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 Desale², William Ravekes³, Kathryn W. Holmes⁴, Richard B. Devereux⁵, Mary J. Roman⁵, Jonathan W. Weinsaft⁵, Todd Seto⁶, Kim A. Eagle⁷, Barbara J. Kroner⁸, Neil J. Weissman². 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 Petrini², 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

Khadija M. Allassas, Charles D. Burger, Christopher O. Austin, Malik A. Al Omari, Preetham N. Kumar, Katherine M. Duello, Ricardo J. Pagan, Brian P. Shapiro. Mayo Clinic, Jacksonville, FL

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

POSTER SESSION 1 (P1) IN THE EXHIBIT & POSTER HALL

Pericardial and Primary Myocardial Diseases P1-195 through P1-200

P1-195 *Moderated Poster*

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. Blauwet², Leslie T. Cooper², John Gorcsan, III¹. ¹University of Pittsburgh, Pittsburgh, PA; ²Mayo Clinic, Rochester, MN
Author Disclosures: J. Gorcsan: 2 (Medtronic, Biotronik, Toshiba), 4 (Medtronic, Biotronik, St. Jude Medical, GE, Toshiba)

P1-198

Blood in the Pericardium: Successful Non-operative Management for the Majority with an Echo-based Pericardiocentesis Practice

Eric R. Fenstad, Assefa M. Ayalew, Larry J. Sinak, Sorin V. Pislaru, Hector I. Michelena, Charles J. Bruce, Naser M. Ammash, Joseph F. Maalouf, Jae K. Oh, Garvan C. Kane. Mayo Clinic, Rochester, MN

P1-199

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

P1-200

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 Ramires, 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

POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

MONDAY, JULY 1, 2013

Presented: 9 am - 4 pm

Meet the Investigators: 12 pm - 1 pm

Moderated Poster Session: 12 pm - 1 pm

Faculty: T. Koliias, A. Klein, S. Park, S. Saha, N. Liel-Cohen, S. Little

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

*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.*

3D Echocardiography P2-01 through P2-48

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 Ghalichi, Samuel Daneshvar, Nidhi Theraja, Larisa Yedigiarova, 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 Matsui¹, Satoru Iwashima⁴, Masaki Nii⁵, Manatomo Toyono⁶, Satoshi Yasukouchi², Msahiko Kishiro¹, Toshiaki Shimizu¹. ¹Juntendo University Faculty of Medicine, Tokyo, Japan; ²Nagano Children's Hospital, Nagano, Japan; ³Kyushu Kosei Nenkin Hospital, Fukuoka, Japan; ⁴Hamamatsu University Faculty of Medicine, Hamamatsu, Japan; ⁵Shizuoka Children's Hospital, Shizuoka, Japan; ⁶Akita University Faculty of Medicine, Akita, Japan

P2-03 Moderated Poster

Apical Rotation Assessed by Three-Dimensional Speckle Tracking Imaging in Patients with Severe Aortic Stenosis

Kazuto Yamaguchi, Saki Ito, Hiroyuki Yoshitomi, Tomoko Adachi, Shuai Liang, Nobuhide Watanabe, Hiroto Sato, Takashi Sugamori, Akihiro Endo, Nobuyuki Takahashi, Kazuaki 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 Yasukochi², Seiichi Tazawa², Mori Hiromitsu², Youhei Akazawa², Yutaka Odanaka², Takehiko Oonoki², Fukushima Yousuke², Akira Hachiya². ¹Kyushuu Kousei Nenkin Hospital, Kitakyuushuu 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

The Usefulness of Left Atrial Longitudinal Myocardial Dysfunction Segmentally Evaluated by Three-Dimensional Speckle Tracking Echocardiography for Identification of Paroxysmal Atrial Fibrillation

Toru Ariyoshi¹, Yasuaki Wada², Shinichi Okuda³, Yoshio Nose³, Kosuke Uchida³, Wakako Murakami³, Noriko Harada³, Hiroko Tsutsumi², Masafumi Yano³. 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

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 Allain³, Mathieu De Craene³, Eric Saloux¹. ¹Caen University Hospital, Caen, France; ²Montreal University Hospital, Montreal, QC, Canada; ³Philips Research Paris, Paris, France

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P2-09

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

POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

- P2-10**
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 Izumo, 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 Izumo, 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
- P2-12**
Three Dimensional Echocardiographic Evaluation of Mitral Apparatus during Preload Manipulation in Patients with Hypertrophic Cardiomyopathy
Hyemooon 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
Ran Heo¹, Geu-Ru Hong¹, Young Jin Kim², Sanghoon Shin¹, In-Jeong Cho¹, Jang-Won Son¹, Chi Young Shim¹, Hyuk-Jae Chang¹, 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 Berdejo¹, 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 Scheurer², Girish Shirali¹, Karina Carlson¹. ¹Children's Mercy Hospitals and Clinics, Kansas City, MO; ²Medical University of South Carolina, Charleston, SC
Author Disclosures: G. Shirali: 4 (Edwards LifeSciences LLC)
- P2-19**
Differences of Mitral Leaflet Topography in Ischemic and Dilated Cardiomyopathy with Functional Mitral Regurgitation
Wei Feng¹, Fang Fang¹, Randolph Wong¹, Ming Hsiung², Cheuk-Man Yu¹, Alex P-W Lee¹. ¹The Chinese University of Hong Kong, Hong Kong, Hong Kong; ²Cheng Hsin General Hospital, Taipei, Taiwan
- P2-20**
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
- P2-21**
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
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- P2-22**
Quantification of Interventricular Contractile Discoordination by Three-Dimensional Area Tracking Strain in Patients with Chronic Pulmonary Hypertension
Keiko Ryo, Tetsuuri Onishi, Josef Marek, Mohamed Ahmed, Kristina Haugaa, Hunter Champion, John Gorcsan, III. University of Pittsburgh, Pittsburgh, PA
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POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

P2-23

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

P2-24

Cyclic Changes in the Distance between Divided Papillary Muscle Heads in Patients with Functional Mitral Regurgitation: A Three-dimensional Transesophageal Echocardiographic Study

Kikuko Obase¹, Ken Saito¹, Tomoko Tamada¹, Koichiro Imai¹, Hiroaki Hayashida¹, Hiroyuki Okura¹, Masashi Komeda², Kiyoshi Yoshida¹. ¹Kawasaki Medical School, Kurashiki, Japan; ²Nagoya Heart Center, Nagoya, Japan

P2-25

Patent Foramen Ovale Parameters for Appropriate Selection of Transcatheter Closure Device: A Real-time 3-Dimensional Transesophageal Echocardiographic Study

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

P2-26

Association of Right Ventricular Geometry with Mitral Regurgitation after Transcatheter Closure in Patients with Atrial Septal Defect

Mana Hiraishi, Hidekazu Tanaka, Takuma Sawa, Yoshiki Yamadori, Junichi Imanishi, Yoshiki Motoji, Tatsuya Miyoshi, Yasuhide Mochizuki, Akihiro Kaneko, Yuko Fukuda, Kazuhiro Tatsumi, Kensuke Matsumoto, Tetsuuri Onishi, Hiroya Kawai, Ken-ichi Hirata. Division of Cardiovascular Medicine, Department of Internal Medicine, Kobe University Graduate School of Medicine, Kobe City, Japan

P2-27

Evaluation of Bubble Grade of Right to Left Shunt in Patients with Patent Foramen Ovale: A Real-time 3-Dimensional Transesophageal Echocardiographic Study

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

P2-28

Normalization of Mitral Annular Dynamics after Repair of Mitral Valve Prolapse: Geometric Quantification Using Intraoperative 3D TEE

Tien-En Chen¹, Rakesh M. Suri², Maurice Enriquez-Sarano Enriquez-Sarano², Hector I. Michelena², Harold M. Burkhardt², Shane M. Gillespie², Geoffrey L. Hayward², Sunil V. Mankad². ¹China Medical University Hospital, Taichung, Taiwan; ²Mayo Clinic, Rochester, MN

P2-29

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

P2-30

Validation of a New Mitral Valve Scoring System by Real-time Three-dimensional Echocardiography Against Operative Findings in Patients with Rheumatic Heart Disease

Dina Labib, Hussien Heshmat, Ahmed Gaafar, Tarek Marei, Maged Salah, Soliman Ghareeb. Cairo University Hospital, Cairo, Egypt

P2-31

Initial Experience Using a Novel Three-Dimensional Volume Intracardiac Echocardiographic Catheter

Kamran Haleem¹, Eric Oligino¹, Benjamin A. Lin¹, Neil Brysoewicz¹, Estelle Camus², Joel Mancina², Jude Clancy¹, Joseph Akar¹, Lissa Sugeng¹. ¹Yale New Haven Hospital, New Haven, CT; ²Siemens Medical Solutions, Malvern, PA
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P2-32

Real Time Three Dimensional Speckle Tracking Echocardiography for Evaluation of Fibrosis in Ischemic and Hypertrophic Cardiomyopathy: A Comparison with Late Gadolinium Enhancement Cardiovascular Magnetic Resonance

Loïc Hilpert, Julien Wain Hobson, Arnaud Pellissier, Fabien Labombarda, Eric Saloux. Caen University Hospital, Caen, France

P2-33

Effects of Obstructive Apnea on the Thoracic Aorta

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

P2-34

Visualization of the Aortic Valve by Real-time 3-Dimensional Transesophageal Echocardiography

Koji Kurosawa, Kazuaki Negishi, Rieko Tateno, Kuniko Masuda, Masaru Obokata, Yoshiaki Houjou, Masahiro Nakajima, Masahiko Kurabayashi. Gunma University Graduate School of Medicine, Maebashi, Japan

P2-35

Right Ventricular Volumetry in Healthy Children and Young Adults by RT3DE - New Axis, New Quantification Tool, Promising Results

Kai T. Laser, Jan P. Horst, Andrea Kelter-Klöpping, Hermann Körperich, Nikolaus A. Haas, Axel Moysich, Eugen Sandica, Deniz Kececioglu. HDZ-NRW, Bad Oeynhausen, Germany

POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

P2-36

Consistency of Agreement between Independent Assessors of Three-Dimensional Global Longitudinal Strain of Whole Right Ventricle and Only Right Ventricular 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 Bellavia¹, Pramod Bonde¹, Abeel Mangi¹, David Yuh¹, Irena Vaitkeviciute¹, Lynn Weinert², 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 Kiotsekoglou², Jie Cao¹, Nathaniel Reichel¹. 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 Annulus Measurement with a Novel 3-Dimensional Transesophageal Echocardiography Method and Its Correlation with Open Surgical Aortic Valve Sizing

George Gellert, Ashish Pershad, Kenneth Fang. Cavanagh Heart Center, Banner Good Samaritan Medical Center, Phoenix, AZ
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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. Geleijnse. Erasmus University Medical Center, Rotterdam, Netherlands

POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

Ischemic Heart Disease/ Stress Echocardiography P2-49 through P2-63

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, Geu-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 Fujii. 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
Author Disclosures: T. Porter: 4 (Lantheus, Astellas, GE Global, Philips Healthcare)

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 Gaibazzi². 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, Hyemooon Chung¹, Ji-Hyun Yoon¹, Jong Youn Kim¹, Pil-Ki Min¹, Young Won Yoon¹, Byoung Kwon Lee¹, Bum-Keek Hong¹, Tae Hoon Kim², Se-Joong Rim¹, Hyuck Moon Kwon¹. 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, Adenvalva L. S. Beck², Mariana L. Silva³, Gerson C. Junior³. ¹Cardiology Institute (ICDF), Brasília, Brazil; ²Instituto de Cardiologia do Distrito Federal (ICDF), Brasília, Brazil; ³Universidade de Brasília (UnB), Brasília, 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

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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 Kadariya², Khalid Mojadidi³, Florentino A. Lupercio³, Harikrishna Makani², Mario Garcia¹. ¹Montefiore Medical Center, Bronx, NY; ²St. Lukes Medical Center, Manhattan, NY; ³Jacobi Medical Center, Bronx, NY

POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

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

Doppler and Strain Echocardiography P2-64 through P2-132

P2-64 Moderated Poster

Maturation 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
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P2-68 Moderated Poster

Relationship between Shear Elasticity of the Myocardium and Ventricular Chamber Pressure

Cristina Pislaru, Matthew W. Urban, Sorin V. Pislaru, Randall R. Kinnick, James F. Greenleaf. Mayo Clinic, Rochester, MN
Author Disclosures: J. Greenleaf: 6 (Phillips)

P2-69

Lung Doppler Signals in Patients with Atrial Fibrillation or Flutter

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P2-70

The Influence of Angle of Insonation on Speckle Tracked Strain

Daniel Forsha¹, Niels Risum², Sudarshan Rajagopal¹, Christoph Hornik¹, Joseph Kisslo¹, Piers Barker¹. ¹Duke University Medical Center, Durham, NC; ²Aalborg University, Aalborg, Denmark
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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, Noriyuki Yanagawa, Nobuhiro Tanabe, Koichiro Tatsumi, Yoshio 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 Pignatelli¹, S. Kristen Sexson Tejtell¹, Qiqiong Cui¹, William J. Dreyer¹, Sarah Sami², 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. McNamara², Luc Mertens². 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 Qamruddin, Ming-Sum Lee, Alyssa Bamba, Alice Stek, Reza Rafie, Mohammad Ghalichi, Samuel Daneshvar, Larisa Yedigarova, Uri Elkayam, Tasneem Z. Naqvi. Keck School of Medicine, Los Angeles, CA
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POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

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

P2-77

Two-dimensional Speckle Tracking Echocardiography in Early Detection and Prediction of Cardiotoxicity During Epirubicin 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 Denfield¹, Aamir Jeewa¹. ¹Baylor College of Medicine, Houston, TX; ²Texas Children's Hospital, Houston, TX

P2-79

The Timing of Early Diastolic Left Ventricular Wall 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

Author Disclosures: W. Little: 2 (CorAssist Cardiovascular, Ltd., Medtronic, Inc., Bio-Control Medical, CVRx, Inc., Amylin Pharmaceuticals)

P2-80

The Determinants of Early Diastolic Intra Left Ventricular Pressure Difference

Hiroyuki Iwano¹, Min Pu¹, Bharathi Upadhyaya¹, 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

Author Disclosures: W. Little: 2 (CorAssist Cardiovascular, Ltd., Medtronic, Inc., Bio-Control Medical, CVRx, Inc., Amylin Pharmaceuticals)

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 Miyoshi², Yasuhide Mochizuki², Mana Hiraishi¹, Akihiro Kaneko², Yuko Fukuda², Kazuhiro Tatsumi², Tetsuaro Onishi², Kensuke Matsumoto², Tetsushi Yamamoto¹, Takamitsu Imanishi¹, Nobuhide Hayashi¹, Hiroya Kawai², 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

P2-83

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, Yoshio 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

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P2-87

Right Ventricular Dyssynchrony and Hemodynamics in Patients with Chronic Thromboembolic Pulmonary Hypertension Following Balloon Pulmonary Angioplasty

Yoshiki Motoji, Hidekazu Tanaka, Yuko Fukuda, Keiko Ryo, Takuma Sawa, Yoshiki Yamadori, Junichi Imanishi, Tatsuya Miyoshi, Yasuhide Mochizuki, Mana Hiraishi, Akihiro Kaneko, Kazuhiro Tatsumi, Tetsuaro 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

POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

P2-88

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 Klina, Brasschaat, Belgium; ⁵Outpatients' Cardiological Clinic Kloppend Hart, Antwerp-Schilde-Essen, Belgium

P2-89

Favorable Effect of Nitroglycerin on Left Ventricular Pulsatile Load in Heart Failure with Preserved Ejection Fraction

Philip Haines¹, Prithvi Shiva-Kumar¹, Salvatore Geraci², Rahul Chandrashekar¹, Snigdha Jain¹, Amin Vakili¹, Victor Ferrari¹, Scott Akers³, Julio Chirinos³. ¹University of Pennsylvania, Philadelphia, PA; ²Philadelphia VA Medical Center, Philadelphia, PA; ³Philadelphia VA Medical Center and University of Pennsylvania, Philadelphia, PA

P2-90

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 Freitas¹, Alessandro C. Lianza¹, Gustavo Favaro¹, Samira S. Morhy¹, José L. Andrade³. 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

P2-92

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, Singapore, Singapore; ⁴Minneapolis VA Hospital, Boston, MN; ⁵Mayo Clinic, Rochester, MN; ⁶Sanofi-Aventis, New York, NY

P2-94

Measurement of Intracardiac Dyssynchrony by 82-Rubidium Positron Emission Tomography Myocardial Perfusion Imaging and Two-Dimensional Speckle Tracking Echocardiography - Do They Correlate?

Aasha S. Gopal, Andrew VanTosh, Rena S. Toole, Kenneth J. Nichols. St. Francis Hospital, Roslyn, NY

P2-95

Contribution of Myocardial Systolic and Diastolic Functions to Pulmonary Hypertension Complicating Moderate-to-Severe Aortic Stenosis

Hyo-Suk Ahn¹, Sung-A Chang², Hyung-Kwan Kim¹, Seon Jin Kim¹, Kyung Yi Kim¹, Seung-Pyo Lee¹, Yong-Jin Kim¹, Goo-Yeong Cho¹, Dae-Won Sohn¹, Jae K. Oh³. ¹Seoul National University Hospital, Seoul, Republic of Korea; ²Samsung Medical Center, Seoul, Republic of Korea; ³Mayo Clinic College of Medicine, Rochester, MN

P2-96

Clinical Significance of Mitral L-wave in Patients with Atrial Fibrillation and Preserved Ejection Fraction

Maya Nakagawa, Hirotsugu Yamada, Susumu Nishio, Shuji Hayashi, Junko Hotchi, Mika Bando, Yukina Hirata, Tatsuaki Tomofuji, Masataka Sata. Tokushima University Hospital, Tokushima, Japan

P2-97

Noninvasive Serial Echocardiographic Findings Associated with Acute Rejection in Pediatric Heart Transplant Recipients

Fatima I. Lunze, Tajinder P. Singh, Kimberlee Gauvreau, Antonio Perez-Atayde, Elizabeth D. Blume, Steven D. Colan. Boston Children's Hospital, Harvard Medical School, Boston, MA

P2-98

Early Diagnosis of Myocardial Dysfunction in Patients with Hematological Malignancies Submitted to Chemotherapy. Preliminary Results

Maria-Cristina D. Abduch¹, Marcelo L. C. Vieira¹, Adriano M. Alencar², Fabio L. Coracin³, Alessandra Barban³, Rosaura Saboya³, Frederico L. Dulle³, Wilson Mathias, Jr.¹. ¹Heart Institute (InCor), The University of Sao Paulo School of Medicine, Sao Paulo, Brazil; ²Institute of Physics - University of Sao Paulo, Sao Paulo, Brazil; ³Bone Marrow Transplant Service - The University of Sao Paulo School of Medicine, Sao Paulo, Brazil

P2-99

Assessment of Right Ventricular Systolic Function by Tissue Doppler Using Multiple Views

Kruti Joshi, Ronald Mastouri, Deborah Green-Hess, Harvey Feigenbaum, Stephen Sawada. Krannert Institute of Cardiology, Indiana University School of Medicine, Indianapolis, IN

P2-100

Left Ventricular Torsion in Patients after the Arterial Switch Operation for Transposition of the Great Arteries with Intact Ventricular Septum

Mingxing Xie, Weijing Zhang. Union Hospital of Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

- P2-101**
Global Longitudinal Strain Predicts Long-Term Adverse Cardiac Events Among Patients with Known Coronary Anatomy
Timothy R. Maher¹, Kofo Ogunyankin², Jyothy Puthumana¹.
¹Northwestern University Feinberg School of Medicine, Chicago, IL; ²First Cardiology Consultants, Lagos, Nigeria
- P2-102**
Early Detection of Left Atrial Dysfunction Using Strain Imaging
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 Klina, Brasschaat, Belgium; ⁵Outpatients' Cardiological Clinic Kloppend Hart Antwerp-Schilde-Essen, Antwerp, Belgium
- P2-103**
Assessment of Optimal Method for Analysing Left Atrial Strain Using Speckle Tracking Imaging
Shuji Hayashi, Hirotsugu Yamada, Susumu Nishio, Junko Hotchi, Mika Bando, Yukina Hirata, Masataka Sata. Tokushima University Hospital, Tokushima, Japan
- P2-104**
Fasting Glucose Levels over 25 Years Predicts Myocardial Dysfunction Assessed by Speckle Tracking Echocardiography (STE): The Coronary Artery Risk Development in Young Adults (CARDIA) Study
Anderson C. Armstrong¹, Satoru Kishi¹, Samuel Gidding², Bharath Ambale-Venkatesh¹, Aldre Almeida¹, Laura Colangelo³, Kiang Liu³, Luis C. Correia⁴, Joao Lima¹. ¹Johns Hopkins University, Baltimore, MD; ²Nemours Cardiac Center, Wilmington, DE; ³Northwestern University, Chicago, IL; ⁴Escola Bahiana de Medicina, Salvador, Brazil
- P2-105**
Left Atrial Strain in Responders and Non Responders to Cardiac Resynchronization Therapy: A Prospective Follow-up Study
Maria J. Eriksson¹, Cinzia Valzania², Giuseppe Boriani², Fredrik Gadler¹. ¹Karolinska University Hospital, Stockholm, Sweden; ²Institute of Cardiology, University of Bologna, Bologna, Italy
- P2-106**
Ventricular Mechanics in Sickle Cell Disease
Hwaida Hannoush, Gregory J. Kato, Andrew E. Arai, Stanislav Sidenko, Myron A. Waclawiw, James G. Taylor, Vandana Sachdev. National Institutes of Health, Bethesda, MD
- P2-107**
Comparison of Right Ventricular Global Longitudinal Strain by Speckle Tracking Echocardiography With Cardiac Magnetic Resonance Feature Tracking Strain
Josef J. Marek, Toshinari Onishi, Mohamed Ahmed, Kristina Haugaa, Keiko Ryo, Joao Cavalcante, John Gorcsan, III. University of Pittsburgh, Pittsburgh, PA
Author Disclosures: J. Gorcsan: 2 (Medtronic, Biotronik, Toshiba), 4 (Medtronic, Biotronik, St. Jude Medical, Toshiba, GE)
- P2-108**
The Use of Transthoracic Echocardiography as a Non-Invasive Method to Detect the Effects of Acute and Chronic Hypoxia in Mice
Timothy Tan, Maria da Gloria Rodrigues-Machado, Arkadi Beloiartsev, Warren Zapol, Marielle Scherrer-Crosbie. Massachusetts General Hospital, Boston, MA
- P2-109**
Improvement of Left Ventricular Three-dimensional Strain Values After Hemodialysis in Patients with End-stage Renal Disease
Attila Kovács¹, Katalin Solymosy¹, 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
- P2-110**
Assessment of Left Ventricular Function using Speckle Tracking Echocardiography in Patients with Isolated Systemic Hypertension
Hetal H. Mehta, Lynette Craney, Brian G. Choi, Richard J. Katz, Jannet F. Lewis. The George Washington University School of Medicine and Health Sciences, Washington, DC
- P2-111**
Relationship Between Resting Left Ventricular Regional Longitudinal, Circumferential and Radial Strains and Coronary Stenosis by Invasive Coronary Arteriography
Aasha S. Gopal, Rena S. Toole, Kenneth J. Nichols, Andrew VanTosh. St. Francis Hospital, Roslyn, NY
- P2-112**
QRS Duration and Mechanical Asynchrony Correlations with Right Ventricular Function in Patients with Early Stage of Chronic Obstructive Pulmonary Disease by Two-dimensional Speckle Tracking Echocardiography
Yang Li¹, Tadaaki Ohno¹, Tsuyako Matsuzaki², Hiroshi Honma¹, Kyoichi Mizuno¹, Kouichirou Kamio³, Arata Azuma³. ¹Department of Cardiovascular Medicine, Nippon Medical School, Tokyo, Japan; ²Department of Echocardiography, Nippon Medical School, Tokyo, Japan; ³Department of Pulmonary Medicine/ Infection and Oncology, Nippon Medical School, Tokyo, Japan
- P2-113**
Estimation of Pulmonary Capillary Wedge Pressure in Mechanically Ventilated Critically Ill Surgical Patients: Investigation of Tissue Doppler Imaging and Proposal of a Novel Echocardiographic Method
Muddassir Mehmood, Kathryn M. Tchorz, Ronald J. Markert, Mukul S. Chandra, Mary C. McCarthy. Wright State University, Dayton, OH

POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

- P2-114**
Temporal Changes in Left Ventricular Radial and Circumferential Strain during Venovenous Extra Corporeal Membrane Oxygenation Following Acute Lung Injury in an Ovine Model
David Platts¹, James Cafaro², Andrew Maurice¹, Sara Diab¹, Kimble Dunster¹, John Fraser¹, Kiran Shekar¹, Darryl Burstow¹, Lin Fung¹, Jonathan Chan¹. ¹The Prince Charles Hospital, Brisbane, Australia; ²Bond University, Robina, Australia
- P2-115**
New Echocardiographic Parameters of Global and Regional Left Ventricular Function in Patients with ST- segment Elevation Acute Myocardial Infarction
Krasimira A. Hristova, Tzvetana Katova, Dobrin Vasilev. National Heart Hospital, Sofia, Bulgaria
- P2-116**
Echo Doppler Markers for Atrial Stunning Post Electrical Cardioversion for Atrial Fibrillation
Salima Qamruddin, Reza Rafie, Samuel Daneshvar, Henry Huang, Vivian Mo, Radha Sarma, Tasneem Z. Naqvi. University of Southern California, Los Angeles, CA
- P2-117**
Two-Dimensional Speckle Tracking Imaging Detects Changes in Left Ventricular Global Systolic Function after Epirubicin Chemotherapy in Patients with Breast Cancer
Qing Lv, Mengyun Yao. Union Hospital of Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China
- P2-118**
Improvement of Left Ventricular Mechanical Dyssynchrony Assessed by Radial Strain Images on the Response after Cardiac Resynchronization Therapy
Yoshie Nakajima, Makoto Matsumura, Miyuki Ariyama, Harumi Ogawa, Ritsushi Kato, Toshihiro Muramatsu, Kazuo Matsumoto, Shigeyuki Nishimura. Saitama International Medical Center, Hidaka, Saitama, Japan
- P2-119**
Right Ventricular Systolic Strain in Patients with Pulmonary Hypertension: Clinical Feasibility and Reproducibility
Ramaimon Tunthong, Garvan C. Kane. Mayo Clinic, Rochester, MN
- P2-120**
Can Right Ventricular Dysfunction be Detected during Mild Stage of Chronic Obstructive Pulmonary Disease by Two-dimensional Speckle Tracking Technology?
Yang Li¹, Tadaaki Ohno¹, Tsuyako Matsuzaki², Hiroshi Honma¹, Kyoichi Mizuno¹, Kouichirou Kamio³, Arata Azuma³. ¹Department of Cardiovascular Medicine, Nippon Medical School, Tokyo, Japan; ²Department of Echocardiography, Nippon Medical School, Tokyo, Japan; ³Department of Pulmonary Medicine/ Infection and Oncology, Nippon Medical School, Tokyo, Japan
- P2-121**
Comparison of Ultrasound Assessment of Interstitial Lung Water with Intrathoracic Impedance and Doppler Echocardiographic and Clinical Assessment of Heart Failure
Sujata S. Balulad, Peter Doelken, Henry Tan, Edward Philbin, Mikhail Torosoff, Steven Fein. Albany Medical College, Albany, NY
- P2-122**
Irbesartan Affects Left Ventricular Systolic and Diastolic Function in Hypertensive Patients with Atrial Fibrillation
Koichiro Imai, Hiroyuki Okura, Tomoko Tamada, Kikuko Obase, Teruyoshi Kume, Akihiro Hayashida, Yoji Neishi, Takahiro Kawamoto, Kiyoshi Yoshida. Kawasaki Medical School, Kurashiki, Japan
- P2-123**
Comparison of Myocardial Longitudinal, Circumferential and Radial Strain by Speckle Tracking Echocardiography in Predicting Target Coronary Territories
Zhiqing Qiao, Xuedong Shen, Jun Pu, Hang Zhao, Jun Wang, Tingyan Xu, Ben He. Renji Hospital Affiliated to Medical College of Shanghai Jiao Tong University, Shanghai, China
- P2-124**
The Significance of Two-dimensional (2D) Strain in Dobutamine Stress Echocardiography - A Single Center Experience
Puay Joo Tan. Changi General Hospital, Singapore, Singapore
- P2-125**
Impact of Dobutamine Stress on Three-dimensional Global Longitudinal Myocardial Strain
Hien Nguyen, Meneleo Dimaano, Rosario Mercado-Young, Tianrong Xie, Masood Ahmad. University of Texas, Galveston, TX
- P2-126**
Radial Displacement by Speckle Tracking Echocardiography for Locating the Target Coronary Artery is Much Better Compared to Radial Strain
Hang Zhao, Xuedong Shen, Zhiqing Qiao, Jun Pu, Jun Wang, Ben He. Renji Hospital Affiliated to Medical College of Shanghai Jiao Tong University, Shanghai, China
- P2-127**
Strain Imaging and Chemotherapy Induced Cardiotoxicity
Kye Taek Ahn. Chungnam National University Hospital, Daejeon, Republic of Korea
- P2-128**
Prognostic Utility of Global Longitudinal Strain for Cardiovascular Admissions over 4 Years of Follow-up
Timothy R. Maher¹, Kofo Ogunyankin², Jyothy Puthumana¹. ¹Northwestern University Feinberg School of Medicine, Chicago, IL; ²First Cardiology Consultants, Lagos, Nigeria

POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

P2-129

Feasibility of Speckle Tracking Analysis of Intra-operative Transesophageal Echocardiographic Images, Correlation of Derived Strain Measures with Operative Outcomes and Comparison with Conventional Ejection Fraction

Ashkan Karimi, Thomas M. Beaver, Gregory M. Janelle, Yong G. Peng, Huong T. Li, William B. Smith, John W. Petersen. University of Florida, Gainesville, FL

P2-130

Analysis of the Right Ventricle During Exercise in Patients Following Mitral Valve Surgery

Laila A. Payvandi¹, Sanjiv J. Shah¹, Andrew Wang², Todd L. Kiefer², Lauren Beussink-Nelson¹, Hamorabi Mkrdichian¹, Vera H. Rigolin¹. ¹Northwestern Memorial Hospital, Chicago, IL; ²Duke University Medical Center, Durham, NC

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Association of Left Ventricular Structure with Left Ventricular Function Among Middle-aged Black and White Adults: The CARDIA Study

Satoru Kishi¹, Jared P. Reis², Anderson C. Armstrong¹, Stephen Sidney³, Colin O. Wu⁴, Bharath A. Venkatesh¹, Nakela Cook⁵, Cora E. Lewis⁶, Kiang Liu⁷, Samuel S. Gidding⁸, João A. C. Lima¹. ¹Johns Hopkins University School of Medicine, Baltimore, MD; ²National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, MD; ³Kaiser Permanente, Oakland, CA; ⁴National Heart, Lung and Blood Institute, Bethesda, MD; ⁵National Heart, Lung, and Blood Institute, Bethesda, MD; ⁶University of Alabama at Birmingham, Birmingham, AL; ⁷Northwestern University, Chicago, IL; ⁸Nemours Cardiac Center, Wilmington, DE

P2-132

Right Ventricular Strain Imaging In Breast Cancer Patients Who Received Trastuzumab-based Chemotherapy versus Non-Trastuzumab-based Chemotherapy

Siri Kunchakarra, Vera Rigolin, Nausheen Akhter. Northwestern University Feinberg School of Medicine, Chicago, IL

Intraoperative Echocardiography and TEE P2-133 through P2-142

P2-133 *Moderated Poster*

Transesophageal Echocardiogram in Thrombocytopenic Patients

Danai Kitkungvan¹, Abhishek Lunagariya², Pimprapa Vejpongsa¹, Cesar Iliescu², Wamique Yusuf², Jose A. Banchs². ¹University of Texas Health and Science Center at Houston, Houston, TX; ²University of Texas MD Anderson Cancer Center, Houston, TX

P2-134 *Moderated Poster*

Transesophageal Echocardiography to Guide Cardioversion in Patients with Atrial Fibrillation After Cardiac Surgery and Left Atrial Appendage Closure

Michael W. Cullen¹, John M. Stulak¹, Naser M. Ammash¹, Zhuo Li¹, Brian D. Powell², Roger D. White¹, Vuyisile T. Nkomo¹. ¹Mayo Clinic, Rochester, MN; ²Sanger Heart & Vascular Institute, Charlotte, NC

P2-135 *Moderated Poster*

Mitral Valve and Septal Defect Dimensions on Three-Dimensional Transesophageal Echocardiography: Measurement on Non-Reformatted versus Multiplanar Reformatted Images

Lynn Weinert, Nicole M. Bhave, Roberto M. Lang. University of Chicago, Chicago, IL

Author Disclosures: R. Lang: 4 (Philips)

P2-136 *Moderated Poster*

Early Experience of Transesophageal Echocardiography-Fluoroscopy Fusion Imaging for Guidance of Structural Heart Disease Interventions within the Catheterization Laboratory

Chad Kliger, Robert Kumar, Sonnit Sharma, Vladimir Jelmin, Gila Perk, Leandro Maranan, Carlos E. Ruiz, Itzhak Kronzon. Lenox Hill Heart and Vascular Institute-North Shore LIJ Health System, New York, NY

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P2-137 *Moderated Poster*

Feasibility of a Novel Echocardiographic Imaging Technique, Intracatheter Echocardiography, to Guide Venovenous Extracorporeal Membrane Oxygenation Cannulae Placement in a Validated Ovine Model

David Platts¹, Andrew Hilton², Sara Diab¹, Charles McDonald¹, Matthew Tunbridge¹, Saul Chemonges¹, Kimble Dunster¹, Kiran Shekar¹, Darryl Burstow¹, John Fraser¹. ¹The Prince Charles Hospital, Brisbane, Australia; ²The Austin Hospital, Melbourne, Australia

P2-138

Differential Diagnosis of Prolapse Versus Billowing Using Three-Dimensional Transesophageal Echocardiography Derived Color-Coded Parametric Models of the Mitral Valve

Karima Addetia¹, Victor Mor-Avi¹, Lynn Weinert¹, Ivan S. Salgo², Roberto M. Lang¹. ¹University of Chicago, Chicago, IL; ²Philips Healthcare, Andover, MA

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Assessment of Accuracy in Transesophageal Echocardiography by Simulation

Han Kim¹, Robina Matyal², Feroze Mahmood². ¹St. Michael's Hospital, Toronto, ON, Canada; ²Beth Israel Deaconess Medical Center, Boston, MA

POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

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Positive-end Expiratory Pressure Influences Echocardiographic Measures of Diastolic Function: A Randomized, Cross-over Study in Cardiac Surgery Patients

Peter Juhl-Olsen, Christian Alcaraz Frederiksen, Erik Sloth. Aarhus University Hospital, Aarhus, Denmark
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P2-141

Which Echo Modality Should be Used in Cardiac Implantable Electronic Device Related Infection

Aswin Mathew, Joshua Grant, Eric Miller, Faiz Subzposh, Heath Saltzman, Andrew Kohut, Steven Kutalek. Drexel University College of Medicine, Philadelphia, PA

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The Impact of Continuous Flow from Venovenous Extracorporeal Membrane Oxygenation Cannulae on Tricuspid Valve Geometry and Function

David Platts, Sara Diab, Charles McDonald, Matthew Tunbridge, Saul Chemonges, Kimble Dunster, Kiran Shekar, Darryl Burstow, Daniel Mullany, John Fraser. The Prince Charles Hospital, Brisbane, Australia

Pediatric and Adult Congenital Heart Disease P2-143 through P2-187

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Left Coronary Artery Doppler Systolic Flow Reversal is Associated with Adverse Myocardial Events Post Arterial Switch Operation for Transposition of the Great Arteries

Christine MacColl, Andreea Dragulescu, Fraser Golding, Luc Mertens, Cedric Manlhiot, Henrik Brun, Brian W. McCrindle, Christopher A. Caldarone, Lynne E. Nield. The Hospital for Sick Children, Toronto, ON, Canada

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Exercise Stress Echocardiography in Children with Hypertrophic Cardiomyopathy

Barbara Cifra, Andreea Dragulescu, Mark Friedberg, Lee Benson, Luc Mertens. Hospital for Sick Children, Toronto, ON, Canada

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Indexed Tricuspid Annular Plane Systolic Excursion - A More Accurate Quantification of Right Ventricular Function in Children

Muhammad Y. Qureshi, Benjamin W. Eidem, Chelsea L. Reece, Patrick W. O'Leary. Mayo Clinic, Rochester, MN

P2-146 Moderated Poster

Left Ventricular Length is an Under-Recognized Critical Measure in Assessment of Left Ventricular Dilation

Stephanie E. Chin, James C. Nielsen, Zhanna Roytman, H. Helen Ko, Irene D. Lytrivi, Shubhika Srivastava. Mount Sinai Medical Center, New York, NY

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Utility of Hand-Held Echo in Outpatient Pediatric Cardiology Patient Management

Alan Riley, Aparna Prasad, Craig Sable, Christopher Spurney, Ashraf Harahsheh, Sarah Clauss, Jessica Colyer, Marcin Gierdalski, Ashley Johnson, Joanna Rosenthal. Children's National Medical Center, Washington, DC

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Three-Dimensional Echocardiographic Reconstruction Accurately Measures Pediatric Right Ventricular Volumes: Preliminary Experience in a Single Institution

Brian D. Soriano, Raylene M. Choy, Shelby Thomas-Irish, Mark R. Ferguson, Randolph K. Otto, Aarti H. Bhat. Seattle Children's Hospital, Seattle, WA
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P2-149

Effect and Correlation of Right Ventricular Dilatation on Left Ventricular Strain & Strain Rate in Adults with Ebstein's Anomaly

Krong-on Pinyoluksana, Garvan C. Kane, Ben Eidem, Hector Villarraga, Joseph Dearani, Heidi Connolly, Naser Ammash. Mayo Clinic, Rochester, MN

P2-150

Echocardiographic Measurement Methods for Left Ventricular Dimensions in Children Result in Predictable Variations in Results

Shelby Kutty, David Russell, Ling Li, Qinghai Peng, Charles Kelly, David Danford. University of Nebraska/Creighton University, Omaha, NE

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Serial Assessment and Prognostic Value of RV Function using Strain Imaging in Children with Idiopathic Pulmonary Hypertension

Kenichi Okumura, Andreea Dragulescu, Luc Mertens, Mark K. Friedberg. Hospital for Sick Children and University of Toronto, Toronto, ON, Canada

P2-152

Sociodemographic Risk Factors for Lack of Prenatal Diagnosis of Hypoplastic Left Heart Syndrome: A Population-Based Study

Shaine A. Morris¹, Mary K. Ethen², Daniel J. Penny¹, Mark A. Canfield², David E. Fixler³, Wendy N. Nembhard⁴. ¹Texas Children's Hospital/ Baylor College of Medicine, Houston, TX; ²Texas Department of State Health Services, Austin, TX; ³Children's Medical Center Dallas/ University of Texas Southwestern Medical Center, Dallas, TX; ⁴Department of Epidemiology, University of South Florida, Tampa, FL

POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

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Measurement of Aortic Annulus Eccentricity using Three-Dimensional Echocardiography in Children with Bicuspid versus Trileaflet Aortic Valves
Christen Chamberland¹, Lissa Sugeng¹, Sharon Abraham², Constance Weismann¹. ¹Yale University School of Medicine, New Haven, CT; ²Yale New Haven Children's Hospital, New Haven, CT
- P2-154**
Umbilical Artery Systolic to Diastolic Ratio and Growth Outcomes in Infants with Hypoplastic Left Heart Syndrome
Thomas Miller, Shaji Menon, Lisa Joss-Moore, Cindy Weng, Michael Puchalski. University of Utah, Salt Lake City, UT
- P2-155**
Tricuspid Annular Systolic Plane Excursion Correlates with Maximal Exercise Testing but Not Six-Minute Walk Distance in Pediatric Pulmonary Hypertension
Amanda Hauck, D. Dunbar Ivy, Adel Younoszai. Children's Hospital Colorado, Aurora, CO
- P2-156**
Assessment of Global Left Ventricular Myocardial Strain using Speckle Tracking Imaging in Children with Valvular Aortic Stenosis: The Duration and not the Severity of the Stenosis affects the Myocardial Mechanics in Children
S. C. Reddy¹, Quqiong Cui¹, Jerry Adams¹, Wolfe B. Steven¹, Doug K. Feagin, Jr², Ricardo H. Pignatelli¹. ¹Baylor College of Medicine, Houston, TX; ²Texas Children's Hospital, Houston, TX
- P2-157**
Torsion of the Human Fetal Left Ventricle Correlates with Gestational Age and Estimated Fetal Weight
Ling Li, Howard Hsu, Qinghai Peng, Jennifer Hickman, David Danford, Shelby Kutty. University of Nebraska/Creighton University, Omaha, NE
- P2-158**
Fetal Strain Using 2D Speckle Tracking Timed with Cardiac Events: A Feasibility Study
Shiraz A. Maskatia¹, Nancy A. Ayres¹, Qiqiong Cui², Gerald Adams², Magnolia J. Nguyen², Wesley Lee³, Carolyn A. Altman¹, Ricardo Pignatelli¹. ¹Baylor College of Medicine, Department of Pediatrics, Section of Cardiology, Houston, TX; ²Texas Childrens Hospital, Department of Cardiology, Houston, TX; ³Baylor College of Medicine, Department of Obstetrics and Gynecology, Houston, TX
- P2-159**
Non-Coronary Inflammation in the Acute Phase of Kawasaki Disease is Associated with Abnormal Myocardial Deformation
Lasya Gaur, Kevin Waloff, Ofer Schiller, Craig Sable, Lowell Frank. Childrens National Medical Center, Washington, DC
- P2-160**
Longitudinal Strain by Speckle Tracking Echocardiography in Pediatric Heart Transplant Recipients
Sujatha Buddhé, Marc E. Richmond, Wyman W. Lai. Morgan Stanley Children's Hospital of NewYork-Presbyterian, New York, NY
- P2-161**
Relationship between Left Atrial Volume and Left Atrial Pressure in Children with Cardiomyopathy
Suying Lam, Paolo G. Rusconi, Nao Sasaki. Jackson Memorial Hospital/University of Miami, Miami, FL
- P2-162**
The Comparative Study: Right Ventricular Assessment in Repaired Tetralogy of Fallot Patients by Echocardiogram and Cardiac Magnetic Resonance Imaging
Poomiporn Katanyuwong. Bangkok Heart Hospital, Bangkok Hospital Group, Bangkok, Thailand
- P2-163**
Systemic Venous Diameters and Collapsibility Indices in Normal Pediatric Subjects
Qinghai Peng, Ling Li, Swetha Natarajan, Rimsha Hasan, Sheela Rangamani, Joseph Abraham, David Danford, Shelby Kutty. University of Nebraska/Creighton University, Omaha, NE
- P2-164**
Segmental Wall Motion Abnormalities can be Detected at Rest by 2D Strain in Patients with Anomalous Aortic Origin of Coronary Artery with Severe Proximal Stenosis
Santosh C. Uppu, H Helen Ko, Ira A. Parness, James C. Nielsen, Shubhika Srivastava. Mount Sinai Medical Center, New York, NY
- P2-165**
Left Atrial Reservoir Function Estimates Pulmonary Capillary Wedge Pressure in Pediatric Heart Transplant Recipients
Jay Yeh, Ranjit Aiyagari, Robert J. Gajarski, Mary C. Zamberlan, Jimmy C. Lu. University of Michigan, Ann Arbor, MI
- P2-166**
Three-Dimensional Transesophageal Echocardiography of Mustard Procedure in Adults
David A. Roberson, Vivian Wei Cui, Waseem Cossor, Saad Siddiqui. Heart Institute for Children, Advocate Children's Hospital, Oak Lawn, IL
Author Disclosures: D. Roberson: 1 (Philips Healthcare); V. Cui: 1 (Philips Healthcare)
- P2-167**
Echocardiographic Predictors of Outcome in the Fetus with Borderline Left Ventricle
David W. Jantzen, Carlen G. Fifer, Sunkyung Yu, Sarah K. Gelehrter. University of Michigan, Ann Arbor, MI

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Analysis of Left Ventricular Wall Motion Dyssynchrony in Patients with Tetralogy of Fallot Quantified using Speckle Tracking Displacement and Strain Imaging

Ken Takahashi¹, Hironobu Takayasu¹, Hisako Tobayama¹, Noboru Tanaka¹, Kotoko Matsui¹, Akio Inage², In-Sam Park², Katsumi Akimoto¹, Masahiko Kishiro¹, Toshiaki Shimizu¹. ¹Juntendo University, Tokyo, Japan; ²Sakakibara Heart Institute, Tokyo, Japan

P2-169

Echocardiographic Diagnosis of Sinus of Valsalva Aneurysm: A 17-year Experience of 212 Surgically Treated Patients from One Chinese Hospital

Yali Yang, Mingxing Xie. Union Hospital of Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China

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Abnormal Left Ventricular Performance and Altered Aortic Stiffness are Present in Patients after Kawasaki Disease with Coronary Artery Aneurysm even without Cardiac Ischemia

Jun Oyamada¹, Manatomo Toyono², Shunsuke Shimada², Mieke Okazaki², Tsutomu Takahashi². ¹Hiraka General Hospital, Yokote, Japan; ²Akita University Graduate School of Medicine, Akita, Japan

P2-171

Detection of Critical Cyanotic Congenital Heart Defects by Automated Algorithm

Alejandra Bueno¹, Franklin Pereira², Lyubomir Zagorchev², Douglas Perrin¹, Gerald Marx¹, Ivan Salgo², Stephen Metz², Pedro del Nido¹. ¹Boston Children's Hospital, Boston, MA; ²Philips Ultrasound Investigations, Andover, MA

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The Impact of the Type of Palliation (Norwood or Hybrid) on Right Ventricular Function in Patients with Hypoplastic Left Heart Syndrome

Bram Ruijsinck, Devin Chetan, Andreea Dragulescu, Mark Friedberg, Osami Honjo, Luc Mertens. The Hospital for Sick Children, Toronto, ON, Canada

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Fetuses of Mothers with Thyroid Disease May Be at Higher Risk of Developing Supraventricular Tachycardia

Jennifer A. Johnson¹, Paula E. Williams², Zengqi Lu¹, Ann Kavanaugh-McHugh¹, Frank A. Fish¹, Stacy A. S. Killen¹. ¹Vanderbilt University, Nashville, TN; ²University of Chicago, Chicago, IL

P2-174

Echocardiographic Measures of Right Ventricular Diastolic Dysfunction are Associated with Risk Factors for Future Intervention as Assessed by MRI in Patients with Repaired Tetralogy of Fallot

Shiraz A. Maskatia¹, Shaine A. Morris¹, Joseph A. Spinner², Rajesh Krishnamurthy³, Carolyn A. Altman¹. ¹Baylor College of Medicine, Department of Pediatrics, Section of Cardiology, Houston, TX; ²Baylor College of Medicine, Department of Pediatrics, Houston, TX; ³Baylor College of Medicine, Department of Radiology, Houston, TX

P2-175

Right Ventricular Enlargement In Utero - Is It Coarctation?

Shanthi Sivanandam, Jessica Nyholm, Andrew Wey, John L. Bass. University of Minnesota, Minneapolis, MN

P2-176

Single Center Experience of Cardiac Screening of Anti-SSA Antibody Exposed Fetuses

Anita Krishnan, Mary Donofrio. Children's National Medical Center, Washington, DC

P2-177

Feasibility of Quantifying Segmental Left Ventricular Function by 2D Speckle Tracking in Assessment of Exercise Stress Echocardiograms in Children

Santosh C. Uppu, H Helen Ko, Rica Arnon, Ira A. Parness, Shubhika Srivastava. Mount Sinai Medical Center, New York, NY

P2-178

Cardiovascular Disease in Twin-Twin Transfusion Syndrome: Comparison of Cardiovascular Assessment Systems

Chet Villa, Mounira Habli, Jodie Votava-Smith, James Cnota, Foong-Yen Lim, Allison Divanovic, Erik Michelfelder. Cincinnati Children's Hospital, Cincinnati, OH

P2-179

Echocardiographic Predictors for Unsuccessful Transcatheter Atrial Septal Defect Closure

Stefan H. Ostermayer, Barry A. Love, H. Helen Ko, Miwa Geiger, Shubhika Srivastava. Mount Sinai Medical Center, New York, NY

P2-180

Are Unicuspid and Bicuspid Aortic Valve Different Phenotypes of the Same Disease? An Insight From the GentAC Registry

Federico M. Asch¹, Siddharth K. Prakash², Mary J. Roman³, Richard B. Devereux³, Jacqueline French⁴, William Ravekes⁵, Kim A. Eagle⁶, Liliana Preiss⁷, Neil J. Weissman¹. 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

POSTER SESSION 2 (P2) IN THE EXHIBIT & POSTER HALL

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Comparing Non-invasive Assessment of Systolic Function with Catheterization Data in Patients with Single Right Ventricles

Nazia Husain, Janaki Gokhale, Lisa Nicholson, John P. Cheatham, Ralf J. Holzer, Clifford L. Cua. Nationwide Children's Hospital, Columbus, OH

P2-182

Fetal Predictors of Postnatal Coarctation in the Setting of Ventricular Discrepancy

Jennifer A. Johnson, Jonathan H. Soslow, Jessica H. Mouldoux, David A. Parra, Ann Kavanaugh-McHugh. Vanderbilt University, Nashville, TN

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Echocardiographic Characteristics of Annulo-Leaflet Mitral Ring

David Schidlow, Kimberlee Gauvreau, Abbas Zaidi, Stephen Sanders, Sitaram Emani, Tal Geva. Boston Children's Hospital, Boston, MA

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Strain and Strain Rate Measured on Echocardiogram 1-3 Weeks After Starting Treatment Predicts One Year Outcome in Children Diagnosed with Acute Dilated Cardiomyopathy

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

P2-185

Utility and Importance of New Echocardiographic Screening Methods in Diagnosis of Anomalous Coronary Artery Origins: Single Center Results

Poonam P. Thankavel, Matthew S. Lemler, Claudio Ramaciotti. UT Southwestern Medical Center, Dallas, TX

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Comparison of Invasive and Non-invasive Pressure Gradients in Aortic Arch Obstruction

Bethany L. Wisotzkey¹, Christoph P. Hornik², Piers C. A. Barker³. 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; ³Duke 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

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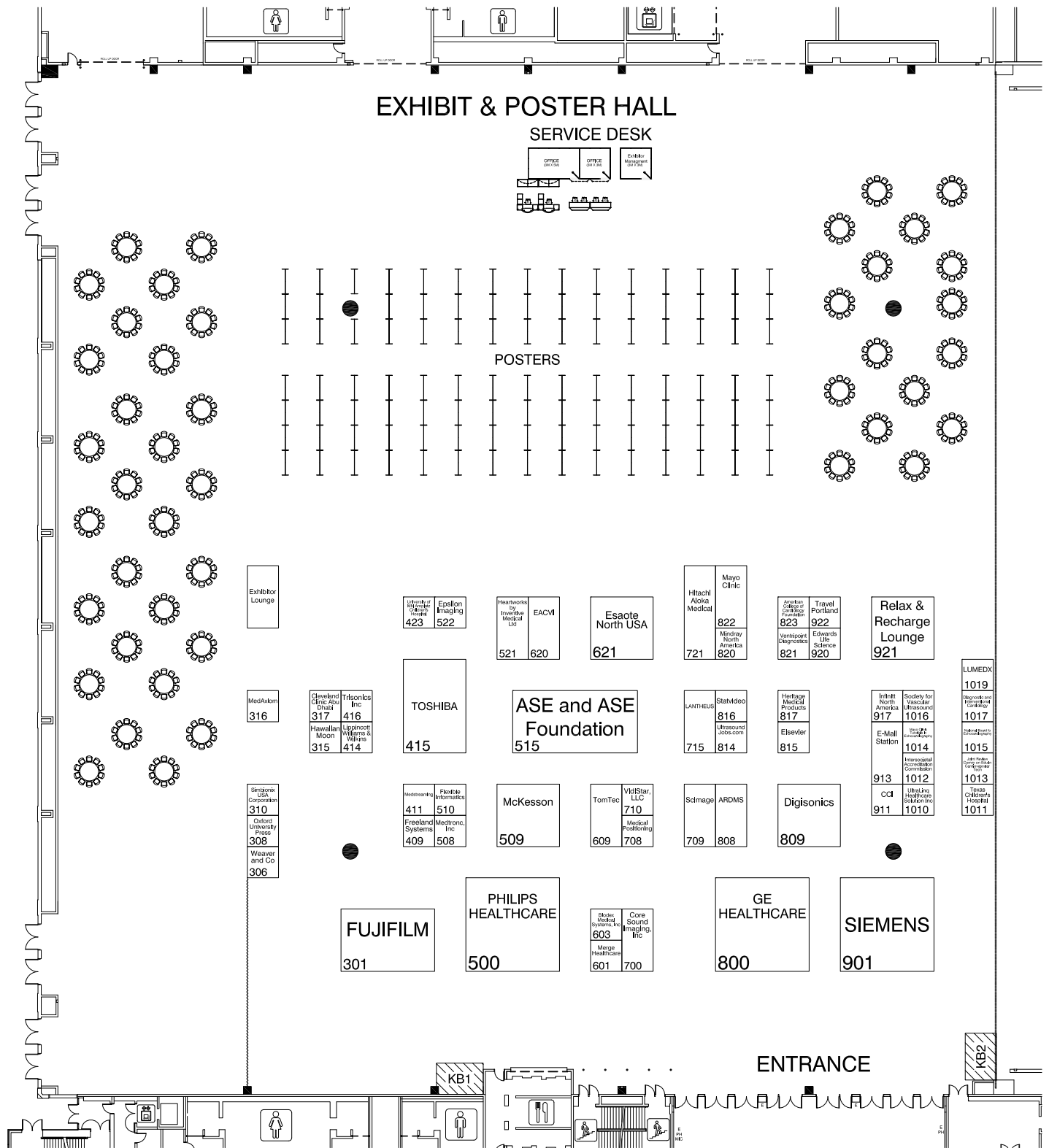
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EXHIBITS

FLOOR PLAN SUBJECT TO CHANGE

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EXHIBIT & POSTER HALL

EXHIBIT & POSTER HALL HOURS

Saturday, June 29

President's Reception 4:30 pm – 6:30 pm

Sunday, June 30 9:00 am – 4:00 pm

Monday, July 1 9:00 am – 4:00 pm

EXHIBIT & POSTER HALL BREAK SCHEDULE

Sunday, June 30

Coffee Breaks 9:30 am – 10:15 am

2:45 pm – 3:30 pm

Lunch Break 11:45 am – 1:15 pm

Monday, July 1

Coffee Break 9:30 am – 10:15 am

Lunch Break 11:45 am – 1:15 pm

Exhibit Hall Closing Celebration 2:45 pm – 3:30 pm



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Visit Siemens in **booth 901** to receive your race packet:

Saturday, June 29
4:30 p.m. – 6:30 p.m.

Sunday, June 30
Packets available at the starting line before the race.

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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

Science & Technology Theatre Schedule

Located in Room 101, Level 1

TOSHIBA

Leading Innovation >>>

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

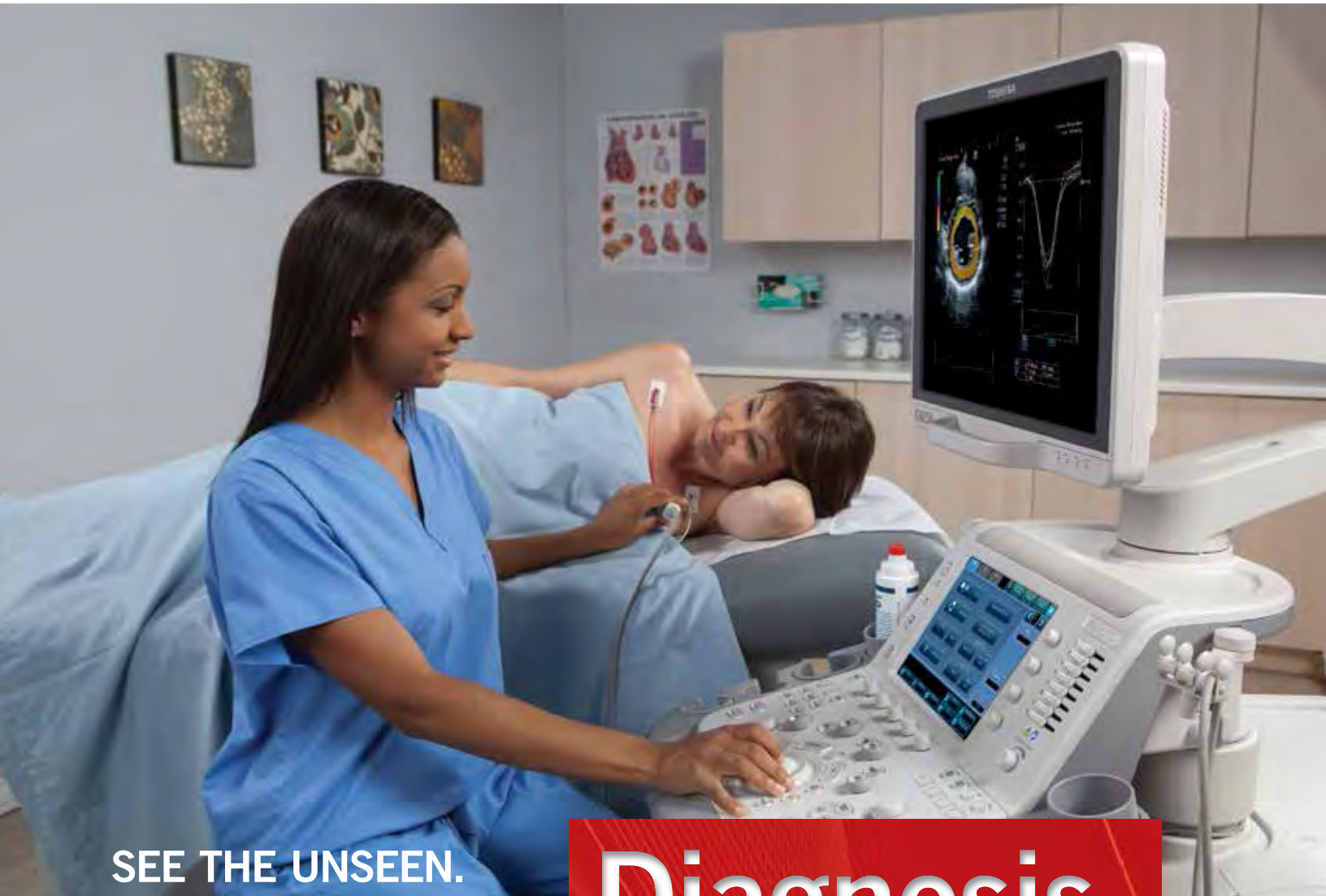
SIEMENS

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.



SEE THE UNSEEN.
FOR EARLIER

Diagnosis.

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

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**



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.



SIEMENS

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.

Answers for life.

EXHIBITOR ASSIGNMENTS

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Biodex Medical Systems	603
Cardiovascular Credentialing International	911
Cleveland Clinic Abu Dhabi	317
Core Sound Imaging Inc	700
Diagnostic & Interventional Cardiology	1017
Digisonics	809
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Epsilon Imaging	522
Esaote North America	621
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IAC-Intersocietal Accreditation Commission	1012
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Joint Review Committee on Education in Cardiovascular Technology	1013
Lantheus Medical Imaging Inc.	715
Lippincott Williams & Wilkins/Wolters Kluwer	414
LUMEDX	1019
Mayo Clinic	822
Mayo Clinic Tutorials in Echocardiography	1014
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ScImage, Inc.	709
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Weaver and Company	306



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DAIC
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Cardiovascular Credentialing International	911
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National Board of Echocardiography	1015
Society of Vascular Ultrasound	1016
Diagnostic & Interventional Cardiology	1017
LUMEDX	1019

EXHIBITOR DESCRIPTIONS

American College of Cardiology Foundation 823

Heart House
Washington DC, 20037
United States
Phone: 202-375-6619
www.cardiosource.org

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.

American Registry for Diagnostic Medical Sonography® (ARDMS) 808

1401 Rockville Pike, Suite 600
Rockville, MD 20852
United States
Phone: 800-541-9754
Fax: 301-738-0313
www.ARDMS.org

ARDMS, is an independent, nonprofit organization that administers examinations and awards credentials in the areas of diagnostic medical sonography (RDMS), diagnostic cardiac sonography (RDCS), vascular interpretation (RPVI) and vascular technology (RVT). With over 80,000 certified individuals throughout the world ARDMS is considered a global standard in medical ultrasound credentialing.

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CCI is a not-for-profit corporation established for the purpose of administering credentialing examinations as an independent credentialing agency. CCI began credentialing cardiovascular professionals in 1968. CCI offers eight credentials which, when earned, demonstrate that the registrant holds fundamental knowledge in the particular cardiovascular specialty. For more information, please visit www.cci-online.org.

Cleveland Clinic Abu Dhabi 317

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Core Sound Imaging, Inc. is built upon the principles of superior software development and uncompromised business ethics. Studycast® and the suite of Core products are leading the way in SaaS medical imaging. Studycast represents a breakthrough in imaging workflow for cardiologists, radiologists and those who rely on their services.

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Edwards Lifesciences is the global leader in the science of heart valves and hemodynamic monitoring. Driven by a passion to help patients, we partner with clinicians to develop innovative technologies in the areas of structural heart disease and critical care monitoring to enable them to save and enhance lives.

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www.elsevierhealth.com

Elsevier, a premier worldwide health science publishing company, is proud to publish Journal of the American Society of Echocardiography, the official journal of the American Society of Echocardiography. Please stop by our booth to view the latest issue of the journal.

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www.epsilon-imaging.com

Epsilon Imaging develops vendor-neutral visualization and analysis software applications for cardiovascular ultrasound. Our initial application, EchoInsight for Stress Echo, assists echocardiologists to efficiently indicate specific areas of abnormality ultimately improving confidence in stress echocardiography.

EXHIBITOR DESCRIPTIONS

Esaote North America..... 621

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www.esaoteusa.com

Esaote's MyLab® portable and console-based echocardiography systems deliver high-performance imaging that's affordable and easy to use. Esaote has installed over 130,000 ultrasound systems worldwide by featuring intuitive cardiovascular applications, like XStrain™ 4D, and focusing on each customer's unique needs. We look forward to learning about yours.

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FUJIFILM Medical Systems is showcasing its Intelligent Structured Reporting (ISR) technology. ISR enables cardiologists to produce high

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GE Healthcare..... 800

9900 W. Innovation Drive
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HeartWorks is a custom designed ultrasound simulation software that has resulted in freely interactive TEE and TTE echocardiography simulation with true to life control. The addition of a life-size manikin simulator which controls the HeartWorks software completes the system creating a realistic simulation of TEE and TTE procedures.

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Hitachi Aloka Medical is proud of the reputation we've built as an industry leader in diagnostic ultrasound. Known for our unparalleled image quality, superior system reliability and intuitive use of cutting edge technology, Hitachi Aloka Medical remains the choice for exceptional diagnostic ultrasound imaging in the field of Cardiovascular medicine.

EXHIBITOR DESCRIPTIONS

Infinitt North America 721

755 Memorial Parkway St. 304
Phillipsburg, NJ 08865
United States
Phone: 908-387-6960
Fax: 908-387-6965
www.infinittna.com

INFINITT Cardiology PACS is a web-based suite of clinical and reporting tools for Cardiology imaging: Echocardiography, Cardiac Catheterization, Non-Invasive Vascular, Nuclear Medicine, EKG Management, etc. The system includes post processing, advanced measurements and 30+ reporting templates with auto-collection of data. The system queries accreditation and management style reports.

Intersocietal Accreditation Commission (IAC) 1012

6021 University Blvd., Ste. 500
Ellicott City, MD 21043
United States
Phone: 800-838-2110
Fax: 866-663-5663
www.intersocietal.org

The Intersocietal Accreditation Commission (IAC) provides a voluntary peer review for facilities performing echocardiography and vascular testing to demonstrate the level of patient care they provide. Visit www.intersocietal.org for more information on current guidelines and reimbursement policies linked to the accreditation status of the laboratory, and other valuable information.

Joint Review Committee on Education in Cardiovascular Technology... 1013

6 Pine Knoll Dr.
Beverly, MA 01915
United States
Phone: 978-456-5594
www.jrcvct.org

JRC-CVT, a Committee on Accreditation member of the Commission on Accreditation of Allied Health Education Programs (CAAHEP), provides accreditation services to certificate and degree programs in colleges and hospitals for any of five concentrations in cardiovascular technology. JRC-CVT is sponsored by ACC, ACR, ASE, SDMS, SICP, and SVU.

Lantheus Medical Imaging, Inc..... 715

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www.lantheus.com

Lantheus Medical Imaging is a global leader in developing, manufacturing and distributing innovative diagnostic imaging agents to improve treatment of human disease. Lantheus has approximately 600 employees worldwide with headquarters in North Billerica, Massachusetts, and offices in Puerto Rico, Canada and Australia.

Lippincott Williams & Wilkins-WKH 414

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Wolters Kluwer Health-Lippincott Williams & Wilkins is the proud publisher of the Journals of the American Heart Association, including Circulation: Cardiovascular Imaging. We offer a full range of specialized books, journals and electronic media.

LUMEDX 1019

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LUMEDX is the market leader in fully integrated, vendor-neutral cardiovascular information and imaging systems (CVIS). LUMEDX has helped more than 700 heart centers worldwide streamline and improve their CV workflows. In 2013, LUMEDX's client base totaled more than 60% of the U.S. News & World Report Best Hospitals.

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Established in 1981, the Mayo Clinic Echocardiography Laboratory is one of the largest clinical, educational and research echocardiographic laboratory facilities of its kind in the world. At Mayo Clinic, patients benefit from the integration of cardiologists, cardiovascular surgeons and other specialists, to determine the appropriate care.

Mayo Clinic Tutorials in Echocardiography 1014

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www.mayo.edu/cme

Mayo Clinic Echo Lab is producing a series of educational DVDS intended to provide information and education in the field of echocardiography for physicians, sonographers.

McKesson 509

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www.mckesson.com

McKesson Cardiology™ is a cardiovascular information system (CVIS) for fetal to adult care (including congenital) that supports echocardiography, vascular ultrasound, nuclear cardiology, catheterization, hemodynamics monitoring, electrophysiology and ECG/stress/holter management. Built on a singular platform, McKesson Cardiology focuses on streamlining workflows to help boost efficiencies and reduce costs.

MedAxiom 316

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Phone: 904-372-2991
www.medaxiom.com

MedAxiom is a community of healthcare leaders focused on creating innovative solutions that influence and drive value in healthcare delivery, patient quality and outcomes by leveraging best-in-class data analytics, healthcare management expertise, and shared experiences.

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Medical Positioning Inc..... 708

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Toll Free: 800-593-3246
Fax: 816-474-7755
www.medicalpositioning.com

MPI manufactures and sells patented specialty platforms designed to improve diagnostic imaging. Every product we offer comes with a story. Your story. The story of a cardiologist who demands more precise imaging. The story of a sonographer who wants a table that is simpler to use and offers pain-free operation.

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Medstreaming Cardiovascular Data-center establishes an exchange for the consolidation and dissemination of clinical based evidence for multiple modalities supporting all standards based vendors equipment. Medstreaming Cardiovascular Data-center affords both reading and referring physicians the capability to monitor and review a patients images and reports.

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www.merge.com



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Mindray North America..... 820

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Mahwah, NJ 07430
United States
Phone: 201-995-8000
www.na.mindray.com

Mindray North America is headquartered in New Jersey. Mindray has been providing medical solutions to medical professionals, worldwide, for over 20 years. M7 & M5, laptop style ultrasound systems, are a practical and effective tool for clinical specialists.

National Board of Echocardiography Inc 1015

1500 Sunday Dr., Ste. 102
Raleigh, NC 27607
United States
Phone: 919-861-5582
Fax: 919-787-4916
www.echoboards.org

As the national examination and certification body for Clinical Echocardiography, the NBE serves as a not-for-profit corporation established to publically recognize those physicians who have completed an approved training program in echocardiography and have passed the ASCeXAM.

Oxford University Press 308

2001 Evans Rd.
Cary, NC 27513
United States
Phone: 919-677-0977
Fax: 919-677-1714
www.oxfordjournals.org / www.oup.com

Oxford University Press publishes some of the most prestigious medical books and journals in the world, including the newly titled European Heart Journal

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www.scimage.com

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Siemens is one of the worlds largest suppliers to the healthcare industry. It is a renowned medical solutions provider with competence and innovative strength in diagnostic and therapeutic technologies. Siemens Healthcare delivers solutions across the entire continuum of care from prevention and early detection, to diagnosis, therapy and care.

EXHIBITOR DESCRIPTIONS

Simbionix USA Corporation 310

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Cleveland, OH 44103
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Society for Vascular Ultrasound (SVU) 1016

4601 Presidents Dr., Ste. 260
Lanham, MD 20706
United States
Phone: 301-459-7550
Fax: 301-459-5651

SVU has been dedicated to the advancement of noninvasive vascular technology used in the diagnosis of vascular disease. The Society has a diverse membership including vascular technologists, surgeons, cardiologists, lab directors and many more. SVU offers over 24 CME credits a year as well as *AMA PRA Category 1 Credits*.

Stat Video, LLC..... 816

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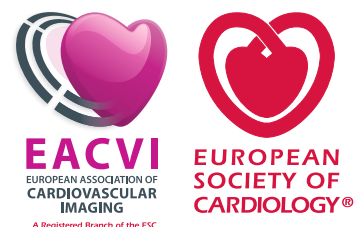
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Adams, M.	None
Agler, D.	None
Ammash, N.	None
Anderson, B.	None
Andrawes, M.	None
Aragam, J.	None
Armour, A.	Philips Healthcare (1)
Armstrong, W.	None
Asher, C.	Lippincott Williams & Wilkins (6)
Asinger, R.	Atritech/Boston Scientific (2)
Badano, L.	GE Healthcare (1); Edwards Lifesciences (2); Sorin Biomedica (7)
Baggish, A.	None
Banka, P.	None
Bansal, M.	None
Barbosa, M.	None
Barker, P.	None
Belcik, J.	None
Belohlavek, M.	Medtronic, Inc. (2); Forest Research Institute, Inc. (1, 2, 3)
Benenstein, R.	None
Berry, J.	None
Bhatia, S.	None
Bhatt, A.	None
Bierig, M.	None
Blauwet, L.	None
Border, W.	None
Brady, M.	None
Bremer, M.	None
Brook, M.	Zonare Ultrasound (2); Siemens Ultrasound (4)
Bruce, C.	None
Buckley, J.	None
Burgess, P.	None
Burkhart, H.	None
Burkule, N.	None
Byrd, B.	None
Carabello, B.	None
Carroll, J.	St. Jude Medical (1, 2, 4, 7)
Cavalcante, J.	None
Cetta, F.	None
Chadachan, V.	None
Chaudhry, F.	Lantheus Medical Imaging (1); GE Medical (1)
Chen-Tournoux, A.	None
Chin, K.	None
Chowdhury, S.	None
Coggins, M.	None
Cohen, M.	None
Coleman, D.	None

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Coon, P.	None	Grayburn, P. ...	Abbott Vascular (2, 4); Bracco Diagnostics (2); Tendyne (2); Medtronic (4); Valtech Cardio (4); Guided Delivery Systems (4)
Dal-Bianco, J.	None	Grimm, R.	None
Davidoff, R.	None	Guerra, V.	None
DeCara, J.	None	Gutierrez-Fajardo, P.	Actelion Pharmaceuticals (1)
DeFaria-Yeh, D.	None	Ha, J.	None
Delling, F.	None	Habib, G.	None
DeMaria, A.	GE (1, 4); Lantheus (4); Epsilon (4)	Hahn, R.	None
Dent, J.	None	Hamburg, N.	None
Desai, M.	None	Harris, C.	None
Di Maria, M.	None	Harris, K.	None
Diglio, H.	None	Heyde, B.	None
Dokainish, H.	None	Hill, G.	None
Doldt, B.	Lantheus Medical Imaging (1)	Hill, J.	Philips Healthcare (1)
Dorfman, A.	None	Ho, C.	None
Douglas, P.	Edwards Lifesciences (4); Atritech/Boston Scientific (4); Icaria (4); Roche (4); BMS (4)	Hoit, B.	Philips Medical (1)
Dragulescu, A.	None	Homma, S.	St. Jude Medical (2); Pfizer Pharmaceutical (2); Takeda Pharmaceutical (2)
Dumesnil, J.	None	Horton, K.	None
Dummer, K.	None	Hryniewicz, K.	None
Eberhardt, R.	Welch's (4)	Hua, L.	None
Edvardsen, T.	None	Huhta, J.	None
Eidem, B.	None	Hung, J.	None
Elvert, L.	None	Hunter, K.	Glaukos, Inc. (2)
Ensing, G.	None	Hutter, A.	None
Estep, J.	Thoratec Corporation (1, 2)	Iliceto, S.	None
Evans, N.	None	Isselbacher, E.	None
Fernandez-Friera, L.	None	Iwanaga, S.	None
Finley, A.	None	Izumi, C.	None
Fischer, J.	None	Janardhanan, R.	None
Flachskampf, F.	GE Healthcare (1)	Johri, A.	None
Fleishman, C.	WL Gore Medical (2, 7)	Kane, B.	None
Forst, D.	None	Kane, G.	None
Forster, M.	None	Kar, S.	Abbott Vascular (2, 4); Boston Scientific (2, 4); St. Jude Medical (4); CircuLite (4)
Fox, A.	None	Kasliwal, R.	None
Francis, G.	None	Kassimatis, K.	None
Friedberg, M.	None	Kaul, S.	None
Friedman, K.	None	Keane, M.	None
Frommelt, P.	None	Khalique, O.	None
Gardin, J.	None	Khandheria, B.	None
Geva, T.	None	Khoo, N.	None
Gill, E.	Lantheus Medical Imaging (1); Philips Medical Systems (2)	Kim, E.	Philips Ultrasound (2); GE (4)
Gillam, L.	Edwards Lifesciences (4); Medtronic (4); Coherex (4)	King, M.	None
Glas, K.	Lippincott Williams & Wilkins (6)	Kirkpatrick, J.	None
Goldberg, D.	None	Kisslo, J.	Philips (1)
Goldstein, S.	None	Kleiman, N.	Medtronic (4)
Gopal, A.	None	Klein, A.	Bayer (2)
Gorcsan, J.	GE (1, 4); Toshiba (2, 4); Medtronic (2, 4); Biotronik (2, 4); St. Jude Medical (2, 4)	Knoll, P.	Lantheus Medical Imaging (1)
Gorman, B.	None	Kolias, T.	Epsilon Imaging, Inc. (4)

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Kort, S.	Premier (1)	Michelena, H.	None
Koulogiannis, K.	None	Mikati, I.	None
Kovalchin, J.	None	Miller, O.	None
Kreeger, J.	None	Mitchell, C.	GE (1, 2)
Krieger, E.	None	Mohan, J.	None
Kronzon, I.	Philips Healthcare (8)	Moller, J.	None
Kumar, R.	None	Monaghan, M.	Philips (1); Siemens (1); GE (1); Edwards (1)
Kurrelmeyer, K.	Bristol Myers Squibb (1); Pfizer (1)	Moon-Grady, A.	None
Kusunose, K.	None	Moore, C.	Philips Healthcare (2)
Kwan, J.	None	Mor-Avi, V.	None
Kwon, D.	None	Mozey, S.	None
Labovitz, A.	None	Mulvagh, S.	Lantheus Medical Imaging (4); Astellas Pharma (4); GE Healthcare (2)
Lai, W.	None	Murata, M.	None
Lancellotti, P.	None	Nagueh, S.	None
Lang, R.	Philips (4)	Nambi, V.	GE (7); Tomtec (7); Anthera (2)
Leong-Poi, H.	Lantheus Medical Imaging (1)	Nanda, N.	None
Lerakis, S.	Edwards Lifesciences (2)	Natarajan, S.	None
Lesser, J.	Siemens Medical (1, 4)	Neary, J.	None
Lester, S.	None	Nemec, E.	None
Liel-Cohen, N.	DiACardio (2, 3)	Neskovic, A.	None
Lindner, J.	GE Medical Imaging (4)	Nesser, H.	Toshiba (1)
Ling, L.	None	Nkomo, V.	None
Little, S.	None	Noble, V.	None
Litwin, S.	Lantheus Medical Imaging (2)	Oh, J.	Medtronic (7)
Liu, A.	None	Okura, H.	None
Lopez, L.	None	Orsinelli, D.	Medtronic (7); Edwards (7)
Lovstakken, L.	GE Vingmed Ultrasound (2)	Orsinelli, M.	Medtronic (7); Edwards (7)
Lowenstein, J.	GE (1)	Otsuji, Y.	None
Lu, J.	None	Otto, C.	None
Luoma, C.	None	Palacios, I. ...	Abiomed (7); Abbott (2); St. Jude Medical (2); Medtronic (2); Edwards Lifesciences (2); Volcano (2); Ample Medical (2)
Maganti, K.	None	Palma, R.	None
Magne, J.	None	Pandian, N.	None
Mahmood, F.	Medtronic (2)	Park, M.	None
Main, M.	Lantheus Medical Imaging (4); GE Healthcare (4)	Park, S.	None
Maisey, S.	None	Passeri, J.	Edward's Lifesciences (2)
Mangion, J.	None	Patil, P.	None
Mankad, S.	None	Pearlman, A.	None
Maron, B.	None	Pellikka, P.	None
Maron, M.	None	Perese, S.	None
Marshall, J.	None	Perez, J.	Biomedical Systems (2)
Marshall, P.	None	Perrin, D.	None
Martin, R.	Siemens (4); Edwards Lifesciences (1); Medtronic (1); Sorin (1); Abbott Vascular- Structural (1)	Peters, P.	None
McCarty, D.	None	Phillips, S.	None
McCulloch, M.	None	Pibarot, P.	Edwards Lifesciences (4)
McCully, R.	None	Picard, M.	None
McIlwain, E.	Toshiba America Medical Systems (1, 2)	Pislaru, S.	None
Mehrotra, P.	None	Plana, J.	None
Menon, S.	None	Poh, K.	None
Mertens, L.	None		

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Poppas, A.	GE (3)	Shillcutt, S.	None
Porter, T. ...	Astellas Pharma Inc. (4); Philips Research North America (4); Lantheus Medical Imaging (4); GE Healthcare (4)	Shiota, T.	Philips (1)
Powell, A.	None	Shirani, J.	None
Prado, A.	None	Shook, D.	Philips Medical (1, 7); Sorin (1); Edwards (1)
Prior, D.	None	Shub, C.	None
Pu, M.	None	Silversides, C.	None
Puchalski, M.	None	Simpson, J.	None
Puthumana, J.	None	Siu, S.	None
Quartermain, M.	None	Skubas, N.	None
Quiñones, M.	None	Slesnick, T.	None
Qureshi, M.	None	Smallhorn, J.	None
Rahko, P.	None	Smart, S.	None
Ramamurthi, A.	None	Smiseth, O.	None
Reeves, S.	Lippincott, Williams & Wilkins (6)	Sniecinski, R.	None
Restrepo, G.	None	Solis, J.	None
Rigolin, V.	None	Solomon, S.	VentriPoint Diagnostics (4)
Rizzo, J.	None	Son, J.	None
Roberts, B.	None	Soriano, B.	VentriPoint Diagnostics (2, 7)
Rodriguez, L.	None	Spencer, C.	None
Ronderos, R.	Medtronic (2)	Spencer, K.	None
Roper, D.	None	Stainback, R.	None
Rose, G.	Abbott Vascular (7)	Stenger, S.	None
Rosenbloom, J.	None	Stewart, W.	Edwards (7)
Rubenson, D.	Edwards Healthcare (7); Abbott (7)	Stinis, C.	Edwards Lifesciences (2), Medtronic (1), Cook Medical (2); Abbott Vascular (1)
Rudski, L.	GE (3)	Stoddard, M.	None
Rychik, J.	None	Stout, K.	None
Sagar, K.	None	Strachan, M.	None
Saha, S.	None	Sugeng, L.	Philips Healthcare (1); Siemens Healthcare (1)
Sanborn, D.	None	Sundt, T.	None
Sanders, S.	None	Swaminathan, M.	None
Saric, M.	None	Szwast, A.	None
Sarkola, T.	None	Tacy, T.	None
Sauer, J.	None	Tajik, A.	None
Sawada, S.	None	Takenaka, K.	None
Saxena, R.	None	Takeuchi, M.	GE Healthcare (4)
Schaff, H.	None	Tam, J.	Boehringer Ingelheim (1, 2); Bayer (1)
Scherrer-Crosbie, M.	None	Taub, C.	None
Schiller, N.	Lantheus Medical Imaging (1)	Texter, K.	None
Schwaegler, B.	None	Thomas, J.	None
Sebag, I.	None	Topilsky, Y.	None
Sedberry, B.	None	Le Tourneau, T.	GE (1); BMS (1); Daiichi (1); Therval Medical (1); Edwards (1); Euthrapie (1)
Seed, M.	None	Tsang W.	None
Sengupta, P.	Forest (4)	Tucker, S.	None
Sengupta, S.	None	Tuzcu, E.	None
Senthilnathan, S.	None	Umland, M.	None
Seward, J.	BioClinica (2); EchoMetrics (3)	Vannan, M.	Siemens (1, 4); Lantheus (1)
Shah, A.	Novartis Pharmaceutical (2)	Velazquez, E.	NHLBI (4); Abbott Vascular (4); Ikaria (4); Novartis (2); Gilead (1)
Sharkey, S.	None	Verhaert, D.	None
Shernan, S.	Philips Healthcare, Inc. (1)		
Sherrid, M.	None		

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Veyrat, C. None
Vidmar, L. None
Villanueva, F. None
Voigt, J. None
Walker, J. None
Walsh, L. None
Wang, Y. None
Ward, R. None
Watanabe, H. None
Wei, K. None
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
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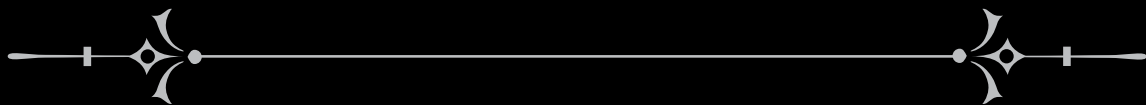
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