

2004 Program Schedule

Saturday, June 26

- 8:30 am-10:30 am** **Continental Breakfast**
*Ballroom 20 Lobby, Upper Level East
(symposia attendees only)*
- 10:00 am-7:00 pm** **Exhibitor Registration**
Level One Foyer-Hall D
- 10:00 am-7:00 pm** **Attendee Registration**
Level One Foyer-Hall D
- 12:30 pm-1:30 pm** **Box Lunches**
*Served Outside Meeting Rooms 30 & 31, Upper Level East
(ticketed attendees only)*
- 4:00 pm-7:00 pm** **ASE Board of Directors Meeting**
San Diego Marriott Hotel & Marina

Full Day Symposium

10:30 am-5:30 pm

Room 29

Intraoperative Symposium: Focus on Advanced Techniques

*(Supported in part by an educational grant from
Edwards Lifesciences)*

*Chairs: Solomon Aronson, MD
Joseph P. Mathew, MD*

10:30 am-10:35 am

Welcome

10:35 am-11:00 am

Advanced TEE Evaluation of the Mitral Valve

Robert M. Savage, MD

11:00 am-11:30 am

**Mechanics of Ischemic Mitral Regurgitation
(Echo Evaluation)**

Judy Hung, MD

11:30 am-12:00 pm

**Mechanics of Myxomatous Mitral
Regurgitation (Echo Evaluation)**

Jack S. Shanewise, MD, FASE

12:00 pm-12:30 pm

**Echo-Guided Rationalization for Intervention—
What to Do and When**

William J. Stewart, MD, FASE

12:30 pm-1:30 pm

Lunch

1:30 pm-2:00 pm

Surgical Approach to Myxomatous Disease

Delos Cosgrove, MD

2:00 pm-2:30 pm

**Surgical Approach to Ischemic Disease—
The Ventricle**

Gerald D. Buckburg, MD

2:30 pm-3:00 pm

**Surgical Approach to Ischemic Disease—
The Annulus**

Steven F. Bolling, MD

3:00 pm-3:30 pm

**Surgical Approach to Ischemic Disease—
The Chordae**

Lawrence H. Cohn, MD

3:30 pm-3:45 pm

Break

3:45 pm-4:00 pm

Intraoperative Evaluation of Mitral Valve Repair

Stanton K. Shernan, MD

4:00 pm-4:30 pm

**Percutaneous Approaches to Ischemic and
Myxomatous Mitral Valve Disease**

William J. Stewart, MD, FASE

4:30 pm-5:30 pm

Panel Discussion

Moderator, Solomon Aronson, MD

Educational Objective: Upon completion of this session, participants will be familiar with advanced intraoperative echocardiographic evaluation of the mitral valve and surgical approaches to mitral valve disease.

Sunday, June 27

7:00 am-8:00 am

Continental Breakfast

*Ballroom 20 Lobby, Upper Level East
(symposia attendees only)*

7:00 am-6:00 pm

Exhibitor Registration

Level One Foyer-Hall D

7:00 am-6:00 pm

Attendee Registration

Level One Foyer-Hall D

7:00 am-5:00 pm

CyberSpASE Café Open

Grand Lobby

11:30 am-1:30 pm

Box Lunches

*Served Outside Meeting Rooms 30 & 31, Upper Level East
(ticketed attendees only)*

5:30 pm-7:00 pm

ASE Board/Industry Reception

*High Spirits, Marriott Marina, Gate 3, Dock F
(located across from yacht club restaurant)*

Full Day Symposium

8:00 am-4:00 pm

Room 20 D

Ninth Annual Symposium on Contrast Echocardiography and Live 3D Echo

(Supported by an educational grant from Philips Ultrasound)

Chairs: Natesa G. Pandian, MD

Roberto M. Lang, MD, FASE

8:00 am-8:10 am

Welcome

Natesa G. Pandian, MD

8:10 am-8:30 am	Contrast Agents, Instrumentation and Applications—Where are We Today? <i>Anthony N. DeMaria, MD, FASE</i>
8:30 am-9:15 am	Clinical Utility of Contrast Agents in Technically Difficult Patients, Intensive Care Units and During Stress Echo Studies (correct assessment of cardiac function and flow, unmasking of underlying pathology and automated quantification) <i>Bijoy K. Khandheria, MBBS</i> <i>Roberto M. Lang, MD, FASE</i> <i>Mark J. Monaghan, PhD</i> <i>Navin C. Nanda, MD</i> <i>Natesa G. Pandian, MD</i>
9:15 am-9:45 am	Microbubbles and Ultrasound in Therapeutic Applications <i>Thomas R. Porter, MD</i> <i>Flordeliza S. Villanueva, MD</i>
9:45 am-10:00 am	Questions and Answers
10:00 am-10:30 am	Break
10:30 am-10:40 am	Perfusion and Function Relationships in Coronary Disease <i>Sanjiv Kaul, MD, FASE</i>
10:40 am-12:00 pm	New Investigations and Clinical Applications in Perfusion Imaging <i>Jonathan R. Lindner, MD, FASE</i> <i>Petros Nihoyannopoulos, MD</i> <i>Thomas R. Porter, MD</i> <i>Neil J. Weissman, MD, FASE</i> <i>William A. Zoghbi, MD, FASE</i> Educational Objective: Upon completion of this session, participants will be familiar with contrast echocardiographic instrumentation, clinical utility, and future therapeutic applications.
12:00 pm-1:00 pm	Break
1:00 pm-1:20 pm	How to Incorporate Live 3D Echo in Daily Practice <i>Natesa G. Pandian, MD</i>
1:20 pm-1:40 pm	What Constitutes an Optimal 3D Echo Examination? <i>Lissa Sugeng, MD</i>
1:40 pm-2:00 pm	Utility of Live 3D Echo in Mitral Valve Disease <i>Roberto M. Lang, MD, FASE</i>
2:00 pm-2:20 pm	Value in Aortic and Tricuspid Valve Disease <i>Navin C. Nanda, MD</i>
2:20 pm-2:30 pm	Quantitative Value of Live 3D Echo <i>Stefano De Castro, MD</i>
2:30 pm-2:50 pm	Break
2:50 pm-3:10 pm	Application in Live 3D Echo in Congenital Heart Disease <i>Gerald R. Marx, MD, FASE</i>

3:10 pm-3:30 pm	How to Employ Live 3D Echo during Stress <i>Andreas Franke, PD</i>
3:30 pm-3:50 pm	3D Echo in Ischemic Heart Disease <i>Joseph Kisslo, MD, FASE</i>
3:50 pm-4:00 pm	Questions and Discussion Educational Objective: Upon completion of this session, participants will appreciate technological advances in live 3D ultrasound and emerging clinical applications.

Half Day Symposium

8:00 am-12:00 pm

Room 31

Echocardiography and Advances in Management of Heart Failure

(Supported by an educational grant from Medtronic, Inc.)

Chair: Bijoy K. Khandheria, MBBS

Co-Chairs: Richard A. Grimm, DO

Satish Kumar Kaushik, MD

Satish Kumar Parashar, MD

8:00 am -8:15 am

Welcome and Overview

Bijoy K. Khandheria, MBBS

8:15 am-8:30 am

Illustrative Cases of Echocardiography in Heart Failure: Not the Usual Suspects. We Present. You Diagnose: Sarcoid

Smadar Kort, MD, FASE

8:30 am-8:45 am

Illustrative Cases of Echocardiography in Heart Failure: Not the Usual Suspects. We Present. You Diagnose: Amyloid

Jeanne M. DeCara, MD

8:45 am-9:00 am

Illustrative Cases of Echocardiography in Heart Failure: Not the Usual Suspects. We Present. You Diagnose: Myocarditis

Muhamed Saric, MD, PhD, FASE

9:00 am-9:15 am

Illustrative Cases of Echocardiography in Heart Failure: Not the Usual Suspects. We Present. You Diagnose: Amyloid

Gabriella Monet Strachan, RDCS, FASE

9:15 am-9:35 am

Break

9:35 am-9:55 am

Evolving Therapies for Heart Failure: Advances in Drugs and When They Fail

Jay N. Cohn, MD

9:55 am-10:15 am

Cardiac Resynchronization: Hope for the Failing Heart or Hype for the Heart that has Failed. Overview of Clinical Trial, Missing Links

Bijoy K. Khandheria, MBBS

Sunday, June 27

10:15 am–10:35 am **Echocardiography, Cardiac Resynchronization: Happily Married Ever After...**

John Gorcsan, III, MD, FASE

10:35 am–10:55 am **Cases to Bring to Light—What I Should Have Done and What I Should Not Have Done: Oops, Maybe I Better Not Do the Implant**

Richard A. Grimm, DO

10:55 am–11:15 am **Cases to Bring to Light—What I Should Have Done and What I Should Not Have Done: Now that I Have Implanted, Help Me Optimize**

Theodore P. Abraham, MD, FASE

11:15 am–11:35 am **Work With Me and Optimize Settings!**

Mary E. Hagen, RN, RDCS

11:35 am–11:55 am **CRT, ICD, or Both: Which Device for Which Patient?**

Mark A. Wood, MD

Educational Objective: Upon completion of this session, participants will appreciate echocardiographic contributions to diagnosis and management of heart failure, including pharmacological and device therapy.

Half Day Symposium

8:00 am–12:00 pm

Room 30 C-E

Vascular Imaging and Physiology Echo Laboratory: The NEW Non-Invasive Echo Lab

Chair: James B. Seward, MD, FASE

Co-Chair: Prediman K. Shah, MD

8:00 am–8:05 am **Welcome and Introduction**

James B. Seward, MD, FASE

8:05 am–8:25 am **Let's get it Straight. Why is it Necessary to Assess Vascular Anatomy and Physiology? What is Missing in our Current Understanding of Cardiovascular Disease?**

Prediman K. Shah, MD

8:25 am–8:45 am **Overview of a Comprehensive Non-invasive Cardiovascular Physiological Examination. Should Vascular Assessment be Routinely Included in the Echo Lab Function? Do I Have to Retrain Myself and My Sonographer? Will This NEW Function Enhance My Practice?**

James B. Seward, MD, FASE

8:45 am–9:05 am

What Vascular Examinations Should be Routinely Performed in Every Echo Lab? How Do I Introduce More Comprehensive Vascular Imaging to My Echo Laboratory? Do My Sonographers and I Need to be Retrained? If so, Where and How?

Itzhak Kronzon, MD, FASE

9:05 am–9:30 am

PANEL DISCUSSION

9:30 am–10:00 am

Break

10:00 am–10:20 am

General Overview of the Vascular System: Blood Pressure, Reflection Waves, Stiffness, Pulse Wave Velocity, Augmentation Index. Is this Relevant to my Understanding and Assessment of Cardiovascular Risk and Function?

Michael O'Rourke, MD, DSc

10:20 am–10:40 am

Risk Prediction Based on Cardiovascular Profiling: Is this Better than Framingham, CRPs, BNP, Lipid, EF, etc.? Am I Learning Something New?

Teresa S. Tsang, MD

10:40 am–11:00 am

Implications of Everything We Have Learned. Ventricular-Vascular Interaction. Pathology Versus Physiology. Are We Entering a New Era of Non-invasive Assessment of the Entire Cardiovascular System?

Michael O'Rourke, MD, DSc

11:00 am–11:20 am

Can the Vascular Morpho-Physiological Information be used to Treat as well as Diagnose Cardiovascular Disease?

Michel Slama, MD

11:20 am–12:00 pm

PANEL DISCUSSION: Dialogue About a New Direction for the Echo Laboratory

Educational Objective: Upon completion of this session, participants will appreciate

1. The newest means of assessing vascular physiology
2. Vascular imaging and its practical utilization
3. Relative value and indications for carotid medial thickness, carotid imaging, and vascular calcification
4. Risk burden based on a comprehensive assessment of vascular physiology
5. Current treatment based on non-invasive physiological assessment and risk stratification

Half Day Symposium

1:00 pm–5:00 pm

Room 28

Echocardiographic Assessment of Cardiac Function: Integrating Established and Emerging Technologies

(Supported by an educational grant from GE Medical Systems)

Chair: Michael H. Picard, MD

1:00 pm–1:25 pm

Established Approaches: What's Important for Systolic Function?

Michael H. Picard, MD

1:25 pm–1:45 pm

Established Approaches: What's Important for Diastolic Function?

Jae K. Oh, MD

1:45 pm–2:05 pm

Myocardial Doppler–Basic Approaches, Definitions, Normal Values for Velocity, Strain, Strain Rate

Theodore P. Abraham, MD, FASE

2:05 pm–2:25 pm

3D Echo–What Does it Add?

William A. Zoghbi, MD, FASE

2:25 pm–2:45 pm

Stress Echo–What's New in 2004?

Thomas Ryan, MD, FASE

2:45 pm–3:00 pm

Break

3:00 pm–3:20 pm

How to Apply Strain/Strain Rate Imaging

Genevieve Derumeaux, MD, PhD

3:20 pm–3:40 pm

Cardiac Resynchronization Therapy–Unique Applications and Opportunities for Echo

John Gorcsan, III, MD, FASE

3:40 pm–4:00 pm

Pacing Site Selection, A-V Synchrony–What is Necessary?

Cheuk-Man Yu, PhD

4:00 pm–4:20 pm

Cases–My Best Case, My Most Disappointing Case

Richard A. Grimm, DO

4:20 pm–4:40 pm

Perspective–How Do I Integrate All of This into Clinical Practice?

James D. Thomas, MD

4:40 pm–5:00 pm

Discussion

Educational Objective: Upon completion of this session, participants will be familiar with established and emerging technologies to quantify cardiac function and integrate them into clinical practice.

Half Day Symposium

1:00 pm–5:00 pm

Room 33

The Changing Face of Heart Failure: What is an Echocardiographer to Do?

(Supported by an educational grant from Pfizer, Inc.)

Chairs: Pamela S. Douglas, MD, FASE

Jay N. Cohn, MD

1:00 pm–1:20 pm

The Changing Face of the Heart Failure Patient in Special Populations: Elderly, Women, African Americans, Concomitant Renal Failure, Anemia, Diabetes, Obesity

Marian Limacher, MD

1:20 pm–1:40 pm

Pearls and Pitfalls of Detecting and Quantifying Systolic Dysfunction

Julius M. Gardin, MD, FASE

1:40 pm–2:00 pm

Diastology is Indispensable

Christopher P. Appleton, MD

2:00 pm–2:15 pm

New Kid on the Block: Vascular Compliance. What is it and How Do I Measure it?

Nancy K. Sweitzer, MD, PhD

2:15 pm–2:30 pm

What Does 3D Echo Add in Cardiomyopathy?

Mani A. Vannan, MBBS

2:30 pm–2:45 pm

Break

2:45 pm–3:00 pm

New Insights into the Pathogenesis of Heart Failure

Nancy K. Sweitzer, MD, PhD

3:00 pm–3:20 pm

Tried and True: Beta-blockers and ACE Inhibitors

Vera H. Rigolin, MD, FASE

3:20 pm–3:40 pm

Emerging Therapies: Aldosterone Inhibition

Jay N. Cohn, MD

3:40 pm–4:00 pm

Preventing Heart Failure Before it Starts: Post MI Care

Steve A. Goldstein, MD

4:00 pm–4:15 pm

Gene Transfer for Myocardial Ischemia and Congestive Heart Failure

H. Kirk Hammond, MD

4:15 pm–4:30 pm

Zap!! What Information the Electrophysiologist is Looking For

Mark A. Wood, MD

4:30 pm–4:45 pm

Out of Our Hands: Use of Echo in Following Patients with VADs or Transplants

John Gorcsan, III, MD, FASE

4:45 pm–5:00 pm

Discussion/Question and Answer

Sunday, June 27

Educational Objective: 1) Participants will enhance their evaluation of patients with heart failure by performing new diagnostic ultrasound techniques and understanding the value of new diagnostic strategies; and 2) Participants will enhance their treatment of patients with heart failure by understanding the importance of current therapies for heart failure and how to implement emerging medications, devices, and treatments into their existing practice.

Half Day Symposium

1:00 pm–5:00 pm

Room 29

Defining a New Standard in Patient Care and Outcomes: The Cutting Edge of Cardiac Imaging

*(Supported by an educational grant from
SIEMENS Medical Solutions)*

Chair: Mani A. Vannan, MBBS

Co-Chair: A. Jamil Tajik, MD

1:00 pm–1:20 pm

Beyond Traditional Cardiac Risk Factors: Vascular Profiling the Pathological Footprints of Disease

Jagat Narula, MD

1:20 pm–1:40 pm

Vascular Profiling: Why and in Whom?

Pamela S. Douglas, MD, FASE

1:40 pm–2:00 pm

Vascular Profiling: Traditional and New Ultrasound Methods

Randolph P. Martin, MD

2:00 pm–2:20 pm

New Echo-Doppler Approaches to Assess Coronary Disease

Paolo Voci, MD, PhD

2:20 pm–2:40 pm

Vascular Profiling: CT and MRI Approaches

Thomas C. Gerber, MD

2:40 pm–3:00 pm

Break

3:00 pm–3:20 pm

Cardiac Resynchronization: Harmony, Synchrony, and the Role of Echo

Linda D. Gillam, MD, FASE

3:20 pm–3:40 pm

Resynchronization: The Third Dimension

Mani A. Vannan, MBBS

3:40 pm–4:00 pm

The Expanding Role of Intraoperative Echocardiography: Redefining Imaging the Mitral Valve using 3D Echocardiography

James D. Thomas, MD

4:00 pm–4:20 pm

The Expanding Role of Intraoperative Echocardiography in Complex Mitral Valve Repair: A Tutorial for the Imager

Steven F. Bolling, MD

4:20 pm–4:40 pm

Echocardiography in the Modern Cardiac Catheterization Laboratory: What is Being Closed, Repaired, and Replaced

Michael Brook, MD

4:40 pm–5:00 pm

2D and 3D Intracardiac Echocardiography

Thomas Bartel, MD

Educational Objective: Upon completion of this seminar, participants will be able to:

1. Summarize the most important issues in clinical cardiology that impact patient management.
2. Recognize the technical and clinical aspects of newer non-invasive cardiac imaging technologies.
3. Identify the competitive and complimentary advantages of non-invasive cardiac imaging technologies in clinical decision-making.
4. Demonstrate the impact on improved patient care through effective use of non-invasive cardiac imaging techniques.

6:00 pm–8:00 pm

Room 30 (C-E)

ICAEL Getting Started Workshop

*Presenters: Cassie Margaret Robbins, RDGS, FASE
Sandra Katanick, CAE*

Educational Objective: Upon completion of this seminar, participants will:

1. Understand the Intersocietal Commission for the Accreditation of Echocardiography Laboratories' history and mission.
2. Recognize the importance of echocardiography accreditation.
3. Have an understanding of the ICAEL Essentials and Standards and the application process.
4. Receive an in-depth explanation of the criteria by which case studies are reviewed.

Monday, June 28

7:00 am–8:00 am

Continental Breakfast

Ballroom 20 Lobby, Upper Level East

7:00 am–6:00 pm

Registration

Level One Foyer–Hall D

10:00 am–6:30 pm

Exhibits Open

Halls D, E

7:00 am–5:00 pm

CyberSpASE Café Open

Grand Lobby

11:30 am–1:30 pm

Box Lunches

Served in Exhibit Halls D, E

(ticketed attendees only)

5:00 pm–6:30 pm

President's Reception

Exhibit Halls D, E

G1 Opening Plenary Session

7:30 am–10:00 am

Room 20 A-C

7:35 am–7:50 am

Welcome

Program Chair: John Gorcsan, III, MD, FASE

ASE Business Meeting & State of the ASE

President: Randolph P. Martin, MD

7:50 am–8:50 am

ASE Young Investigators Award Finalists

Abstract Chair: William A. Zoghbi, MD, FASE

Non-invasive in Vivo Ultrasound Imaging of Apoptosis in Acute Myocardial Infarction with Annexin-V Conjugated Microspheres

Johan Verjans, MD, University of California, Irvine, CA

Myocardial Fiber Direction and the Transmural Sequence of Deformation Influences Genesis of Spectral Waveforms in Doppler Myocardial Imaging

Partho Sengupta, MD, Mayo Clinic, Rochester, MN

Feasibility of Quantitative Assessment of Myocardial Perfusion Using Real-Time 3Dimensional Echocardiographic Imaging

Eran Toledo, MD, University of Chicago, Chicago, IL

Incremental Value of Regional Perfusion over Regional Function in Patients Presenting to the Emergency Department with Suspected Cardiac Chest Pain

Khim Leng Tong, MD, University of Virginia, Charlottesville, VA

8:50 am–9:00 am

Presentation of Excellence in Teaching Awards & Sonographer Scholarship Winners

President: Randolph P. Martin, MD

9:00 am–9:05 am

Young Investigators Award Winner Presentation

Abstract Chair: William A. Zoghbi, MD, FASE

9:05 am–9:20 am

Incoming President's Address

Linda D. Gillam, MD, FASE

9:20 am–10:00 am

Edler Lecture: "Making a Difference in Individual Lives"

President: Randolph P. Martin, MD

10:00 am–10:30 am

Break

ATTENDEES ARE INVITED TO VISIT EXHIBITS AND REFRESHMENT AREA ON THE EXHIBIT FLOOR

Concurrent Sessions

10:30 am–12:00 pm

Room 20 (A-C)

G2 – Disease Focus

Disease of the Day: Heart Failure

Chairs: Pamela S. Douglas, MD, FASE
A. Jamil Tajik, MD

10:30 am–10:55 am

Special Lecture: Heart Failure, Disease in Evolution

Jay N. Cohn, MD

10:55 am–11:10 am

Pivotal Role of Echocardiography in the Failing Ventricle

Miguel A. Quiñones, MD

11:10 am–11:25 am

Predicting Outcome in Heart Failure

Michael H. Picard, MD

11:25 am–11:40 am

The Doppler Hemodynamic Approach to the Heart Failure Patient

Fletcher A. Miller, Jr., MD, FASE

11:40 am–11:55 am

Heart Failure with Preserved Ejection Fraction: What Do I Do Now?

Gerard P. Aurigemma, MD

Educational Objective: Upon completion of this session, participants will appreciate changes in heart failure diagnosis and management. They will discover the essential roles that echocardiography and Doppler ultrasound play in clinical care.

10:30 am–12:00 pm

Room 20-D

A2 – Cases

Interesting Cases of Systolic and Diastolic Heart Failure

Chair: Linda D. Gillam, MD, FASE

Case Presenters: Imran Afridi, MD

Giorgio Galanti, MD

Farooq A. Chaudhry, MD

Chuwa Tei, MD

Peter Sogaard, MD

Linda D. Gillam, MD, FASE

Educational Objective: In this session participants will interact with faculty on interesting and educational diagnostic cases of systolic and diastolic heart failure.

Monday, June 28

10:30 am-12:00 pm

Room 33

X2 – Meet the Experts/How To

Contemporary Echo-Doppler Hemodynamic Evaluation

*Chairs: David A. Orsinelli, MD
Luis M. Amuchastegui, MD*

10:30 am-10:50 am **Doppler Assessment In 2004: What Should We Measure and Why?**

Harry Rakowski, MD, FASE

10:50 am-11:05 am **Estimation of Filling Pressures: The Basic Approach**

Susan E. Wieggers, MD, FASE

11:05 am-11:20 am **Pitfalls and Clinical Pearls**

Alan S. Pearlman, MD, FASE

11:20 am-11:35 am **Constriction-Restriction: The Echo Lab Makes the Call**

Richard A. Grimm, DO

11:35 am-11:50 am **Echo-Doppler Assessment in Pulmonary Hypertension**

Angel Lopez-Candales, MD, FASE

Educational Objective: Upon completion of this session participants will become familiar with a contemporary echo-Doppler hemodynamic evaluation including its role in estimation of filling pressures, constriction, restriction and pulmonary hypertension.

10:30 am-12:00 pm

Room 30 (C-E)

S2 – Sonographer Track

Sonographer Update

Chair: Sandra A. Witt, RDGS, FASE

10:30 am-11:00 am **Welcome & Introduction**

Sandra A. Witt, RDGS, FASE

11:00 am-11:30 am **Sonographer Research Grant Recipient 2002: Research Update**

Alan D. Waggoner, MHS, RDGS

11:30 am-12:00 pm **Are You Stuck in the Left Lateral Decubitus Position: Scanning Your Career from all Angles**

Barbara Sternlight McCarthy, BA, RDMS

Educational Objective: Upon completion of this session, participants will be able to apply new techniques to improve their workplace experience and career development.

10:30 am-12:00 pm

Room 30 A-B

CC2 – Core Curriculum

Physics 100: How the Image is Created

*Chairs: Rick Rigling, BS, RDGS, FASE
Marcus F. Stoddard, MD*

10:30 am-12:00 pm **Ultrasound Physics for Beginners, the Principles Behind the Pictures**

Sidney K. Edelman, PhD

Educational Objective: Upon completion of this session, participants will understand:

1. Basic ultrasound physics as they apply to echocardiographic image generation.
2. Basic ultrasound machine knobology (the key machine settings that can be used to optimize echo images).

10:30 am-12:00 pm

Room 29

PE2 – Pediatric Track

Controversies in Echo-Guided Interventions

Chair: Richard A. Humes, MD

10:30 am-11:00 am **ICE is Preferable to TEE for Device Closure of ASD's**

Pro: Peter R. Koenig, MD

Con: Ricardo H. Pignatelli, MD

11:00 am-11:30 am **Intraoperative Device Closure of Muscular VSD's is Preferable to Surgery in Infancy**

Pro: Ernerio T. Alboliras, MD

Con: Ira A. Parness, MD

11:30 am-12:00 pm **Echo-Guided Fetal Intervention is Warranted in Critical Outflow Obstruction**

Pro: Wayne Twaretzky, MD

Con: Charles S. Kleinman, MD

Educational Objective: Upon completion of this session, participants will be able to 1) understand the benefits and risks comparing intracardiac echocardiography and transesophageal echocardiography for imaging device closure of atrial septal defects; 2) realize the potential and limitations associated with echo-guided intraoperative device closure of muscular ventricular septal defects in infants; and 3) appreciate the advances and limitations associated with echo-guided interventions to palliate critical outflow obstruction in the fetus with congenital heart disease.

12:00 pm-1:15 pm

Lunch Break

ATTENDEES ARE INVITED TO VISIT EXHIBITS AND BOX LUNCH AREA ON THE EXHIBIT FLOOR

Abstract Poster Session 1

Exhibit Halls D, E

Presented: 10:00 am–1:00 pm

Moderated: 10:30 am–12:00 pm

Moderators: 1. Robert A. Levine, MD
2. Kiyoshi Yoshida, MD

3D Echocardiography and Valvular Heart Disease

Moderated Posters P1-01–P1-15

P1-01 Proximal Flow Convergence Region as Assessed by Matrix-Array Real-Time 3D Echo: The Complexity of the Isovelocity Contour

Chaim Yosefy, Mordehay Vaturi, Robert A Levine, Judy Hung. Massachusetts General Hospital, Boston, MA

P1-02 Improved Quantification of Left Ventricular Mass Using Real-Time Three-Dimensional Echocardiography: Comparison with Magnetic Resonance Imaging

Victor Mor-Avi¹, Lissa Sugeng¹, Enrico G Caiani¹, Lynn Weinert¹, Peter MacEneaney¹, Rick Koch¹, Ivan Salgo², Roberto M Lang¹. ¹University of Chicago, Chicago, IL; ²Philips Medical Systems, Andover, MA

P1-03 Determinants of Ischemic Mitral Regurgitation in Patients with Anterior Myocardial Infarction: A Real-Time Three-Dimensional Echocardiography Study

Jong-Min Song, Takahiro Shiota, Jian Xin Qin, Deborah A Agler, Vorachai Kongsarepong, Nicholas G Smedira, Patrick M McCarthy, A. Marc Gillinov, Delos M Cosgrove, James D Thomas. Cleveland Clinic Foundation, Cleveland, OH

P1-04 Analysis Requirements for Practical Use of Live 3D Echocardiography: How Much is Really Necessary?

Rupa R Krishnaswamy, Aasha S Gopal, Rena S Toole, William Schapiro, Florentina Petillo, Nathaniel Reichek. St. Francis Hospital, Roslyn, NY

P1-05 Complimentary Role of Live 3D Echo during Routine 2D Dobutamine Stress Echocardiography

Masood Ahmad, Zening Jin, Tianrong Xie, Ildiko Agoston, William Hendrix. University of Texas Medical Branch, Galveston, TX

P1-06 Quantification of Left Ventricular Volumes and Mass from Real-Time Three-Dimensional Images Using Semi-Automated Detection of Endocardial and Epicardial Surfaces

Enrico G Caiani¹, Cristiana Corsi², Peter MacEneaney¹, Lynn Weinert¹, Roberto Battan², Victor Mor-Avi¹, Roberto M Lang¹. ¹University of Chicago, Chicago, IL; ²University of Bologna, Bologna, Italy; ³Politecnico di Milano, Milan, Italy

P1-07 Comparison of Echocardiographic Methods to Cardiac Magnetic Resonance Imaging for Determination of Left Ventricular Mass

Rupa R Krishnaswamy, Aasha S Gopal, Sathesh Joseph, Rena S Toole, Florentina Petillo, William Schapiro, Nathaniel Reichek. St. Francis Hospital, Roslyn, NY

P1-08 Real-Time 3D Echo is a Reliable and Reproducible Technique for Measurement of Left Ventricular Mass

Carly Jenkins, Kristen Bricknell, Lizelle Hanekom, Thomas H Marwick. University of Queensland, Brisbane, Australia

P1-09 Novel Technique for Quantitative Wall Motion Analysis Using Real-Time Three-Dimensional Echocardiography

Susan Herz, Todd Pulerwitz, Kumiko Hirata, Andrew Laine, Marco DiTullio, Shunichi Homma, Jeffrey Holmes. Columbia University, New York, NY

P1-10 A Real Time Three Dimensional Digital Doppler Method for Measurement of Stroke Volume through the Mitral Valve Orifice in Children: Comparison with Magnetic Resonance Imaging

Liping Bu¹, Honghai Zhang², Michelle Disterhoff³, Michael Dixon³, Alan Stolper³, Milan Sonka², Shuping Ge¹. ¹Pediatric Cardiology, University of Iowa, Iowa City, IA; ²Department of Electrical and Computer Engineering, University of Iowa, IA; ³Department of Radiology, University of Iowa, IA

P1-11 Live 3D Echo and Biplane Evaluation of Mitral Stenosis for Predication of Mitral Valvuloplasty Success

Edward A Gill, Jr.¹, Eric J Sisk¹, Terese A Tognazzi-Evans¹, Julie A Brie², Shawn L Popylisen³, Aaron Blanford⁴, Rajesh Bholal⁴, Jason E Cooke¹, John D Carroll¹. ¹University of Washington School of Medicine, Harborview Medical Center, Seattle, WA; ²Philips Ultrasound, Philips Medical Systems, Bothell, WA; ³University of Colorado Hospital, Denver, CO; ⁴University of Kansas, Kansas City, MO; ⁵University of Colorado Health Sciences Center, Denver, CO

P1-12 Morphologic Shape Changes of the Left Ventricle Following Beta Blocker Therapy in Heart Failure Patients Using Three Dimensional Echocardiography: A More Pronounced Effect in Patients with Dilated Cardiomyopathy or Contractile Reserve at Baseline

Ravi Gurujal¹, Kameswari Maganti¹, Frank Seghato¹, Beverly Smulevitz¹, William G Cotts¹, Mihai Gheorghade¹, Robert O Bonow¹, Edwin Dove², Vera H Rigolin¹. ¹Northwestern University, Chicago, IL; ²University of Iowa, Iowa City, IA

P1-13 Prognostic Implications of Right Ventricular Systolic Tissue Doppler Velocities in Patients with Prior Mitral Valve Surgery

Nazem Akoum, Jo Mahenthiran, Rami Akel, Waqas Ghumman, Masoor Kamalesh, Irmira Gradus-Pizlo, Harvey Feigenbaum, Stephen G Sawada. Indiana University, Indianapolis, IN

P1-14 Papillary Muscle Dysfunction Paradoxically Decreased Mitral Regurgitation Severity: Insights from Papillary Muscle Tissue Doppler Assessment

Banithit Khankirawatana, Suwanee Khankirawatana, Heidi Mahrous. University of Nebraska Medical Center, Omaha, NE

P1-15 Intracardiac Echocardiography: An Ideal Guiding Tool for Device Closure of Interatrial Communications

Thomas Bartel, Thomas Konorza, Holger Eggebrecht, Tiko Ebralidze, Raimund Erbel. University Essen, Essen, Germany

Contrast Echocardiography: Techniques & Applications (I)

Posters P1-16–P1-25

P1-16 Validation of Three-dimensional Area at Risk by Myocardial Contrast Echocardiography in Mice

Ryuji Hataishi¹, Ana Clara Tude Rodrigues¹, Genevieve Derumeau², Fumito Ichinose¹, Kenneth D Bloch¹, Michael H Picard¹, Marielle Scherrer-Crosbie¹. ¹Massachusetts General Hospital, Boston, MA; ²INSERM E 9920, Rouen University, Rouen, France

P1-17 Identification of Risk Area and Infarct Zone Myocardium from the Hyperenhancement Visualized After Occlusion/Reperfusion using Delayed Imaging and Exposure to High Energy Ultrasound

Hideki Kunichika, Bruno Cotter, Naomi Kunichika, Anthony N DeMaria. University of California, San Diego, San Diego, CA

P1-18 Quantitative Changes in Blood Brain Barrier Permeability Induced by Transcranial Ultrasound and Intravenous Injected Microbubbles

Thomas R Porter, Jeane M Tsutsui, John Lof, Stanley J Radio, Feng Xie. University of Nebraska Medical Center, Omaha, NE

P1-19 Influence of Acoustic Power for Bubble Destruction on Quantitative Parameters of the Myocardial Perfusion in Real-Time Myocardial Contrast Echocardiography

Kentaro Otani, Ayako Hongawa, Kasumi Masuda, Toshihiko Asanuma, Fuminobu Ishikura, Shintaro Beppu. School of Allied Health Sciences, Faculty of Medicine, Osaka University, Suita, Japan

Monday, June 28

P1-20 Does Contrast Enhancement Improve Left Ventricular Volume Measurements from Real-Time Three-Dimensional Echocardiography?

Enrico G Caiati¹, Lissa Sugeng¹, Cristiana Corsi², Peter MacEneaney³, Lynn Weinert¹, Rick Koch¹, Roberto Battan³, Victor Mor-Avi¹, Roberto M Lang¹. ¹University of Chicago, Chicago, IL; ²University of Bologna, Bologna, Italy; ³Politecnico di Milano, Milan, Italy

P1-21 Prognostic Value of Myocardial Contrast Echocardiography for the Long-term Prediction of Cardiac Events in Patients with Confirmed Coronary Artery Disease

Alvaro Moraes, Flavio C Palheiro, Marcia Carrinho, Antonio Carlos Nogueira, Renato Morcerf, Flavia Brasil, Alexandre B Martins, Caio Medeiros, Fernando Morcerf. ECOR-Centro de Diagnóstico Cardiovascular, Rio de Janeiro, Brazil

P1-22 Detection and Quantification of Coronary Artery Disease Following Intravenous Bolus Injections of Lipid Encapsulated Microbubbles During Dipyridamole Stress

Anna C McGrain¹, Jeane M Tsutsui¹, Feng Xie¹, Heidi Mahrous¹, Martin Rosenberg², Jordan H. Hankins¹, Thomas R Porter¹. ¹University of Nebraska Medical Center, Omaha, NE; ²Bristol-Myers Squibb Medical Imaging, North Billerica, MA

P1-23 Comparison of AI-700 Echo and Nuclear Perfusion Imaging to Coronary Angiography in Patients with Suspected Coronary Disease

Paul A Grayburn¹, William A Zoghbi², Neil J Weissman³, Allan L Kleinf⁴, Arian Pano⁵, Richard C Walovitch⁶, Michael H Picard⁶. ¹Baylor Heart & Vascular Institute, Dallas, TX; ²Baylor College of Medicine, Houston, TX; ³Washington Hospital Center, Washington, DC; ⁴Cleveland Clinic, Cleveland, OH; ⁵Acusphere, Inc., Watertown, MA; ⁶Massachusetts General Hospital, Boston, MA

P1-24 Contrast-enhanced Echocardiography Improves Interobserver Agreement on Assessment of Ejection Fraction-A Multicenter Study

Rainer Hoffmann¹, Stephan von Bardeleben², Adrian Borges³, Jaroslav Kasprzak⁴, Christian Firschoke⁵, Stephane Lafitte⁶, Nidal Al-Saadi⁷, Stefanie Kuntz-Hehner⁸, Marc Engelhardt⁹, Harald Becher¹⁰, Jean Louis Vanoverschelde¹¹. ¹University Aachen, Aachen, Germany; ²University Mainz, Mainz, Germany; ³Charite Berlin, Berlin, Germany; ⁴University Lodz, Lodz, Poland; ⁵University Munich, Munich, Germany; ⁶Hospital Haut-Leveque, Pessac, France; ⁷University Charite Berlin, Berlin, Germany; ⁸University Bonn, Bonn, Germany; ⁹Bracco, Milan, Italy; ¹⁰University Oxford, Oxford, United Kingdom; ¹¹University Brussels, Brussels, Belgium

P1-25 Quantitative Myocardial Contrast Echo is Superior to Qualitative Myocardial Contrast Echo for Prediction of TIMI flow in Acute Myocardial Infarction

Stuart Moir, Brian Haluska, Domenic Leung, Paul Garrahy, Thomas H Marwick. University of Queensland, Brisbane, Australia

Congenital Heart Disease

Posters P1-26-P1-38

P1-26 Creating an Atrial Communication Using High Intensity Focused Ultrasound (HIFU): An in Vitro Dosemetry Study

Rebecca Craig¹, Liping Bu¹, Ernie Bailey¹, Honghai Zhang¹, Viren Amir², Thomas Scholz², Shahram Vaezy³, Douglas Behrendt⁴, Shuping Ge¹. ¹University of Iowa, Iowa City, IA; ²Iowa State University, Ames, IA; ³University of Washington, Seattle, WA

P1-27 Pediatric Normative Data and Z Scores Revisited: Echocardiographic Data from a Heterogeneous Population of over 6,000 Patients

Craig Sable¹, Mary Ellen Skeens², Gerard Martin¹, Richard Humes³. ¹Children's National Medical Center, Washington, DC; ²Philips Medical Systems, Andover, MA; ³Children's Hospital of Michigan, Detroit, MI

P1-28 Incidence of Aortic Regurgitation after Implant of the Amplatzer Septal Occluder

Myriam V Ferreira, Louis I Bezold, Ronald G Grifka, Charles E Mullins, Benjamin W Eidem, Colin J McMahon, John P Kovalchin, Nancy A Ayres, Ricardo H Pignatelli. Baylor College of Medicine, Houston, TX

P1-29 Electrocardiography in the Diagnosis of Right Ventricular Hypertrophy in Children

Michael D Puchalski, John S Lozier, David J Bradley, LuAnn Minich, Lloyd Y Tani. University of Utah, Salt Lake City, UT

P1-30 Ventricular Non-Compaction in the Young: Is There an Epidemic or are we Over-Diagnosing?

Frank Cetta, Heidi M Connolly, Martha Grogan, James B Seward, Patrick W O'Leary. Mayo Clinic, Rochester, MN

P1-31 Systemic to Pulmonary Collateral Circulation in Very Low Birth Weight Mechanically Ventilated Premature Infants: Another Form of Left-to-Right Extra-cardiac Shunt

Claudia R P Castro, Sr., Joaquim Cabral, Andressa Mussi Soares, Humberto Sobrinho, Luis Carlos Ferreira, Marcos Valério Resende. São Luiz Hospital and Maternity, Itaim, São Paulo, Brazil

P1-32 40 MHz Ultrasound Reveals Multiple Mechanisms of Embryonic Heart Failure in NFATc1 Knockout (-/-) Mice

Colin K L Phoon¹, Rui Ping Ji², Orlando Aristizabal¹, Bin Zhou², Diane M Worrad³, H. Scott Baldwin⁴, Daniel H Turnbull⁵. ¹Skirball Institute of Biomolecular Medicine, New York University School of Medicine, New York, NY; ²Vanderbilt University School of Medicine, Nashville, TN; ³Children's Hospital of Philadelphia, Philadelphia, PA

P1-33 Aortic Root Dilation in Children and Adults with Tetralogy of Fallot: Impact of Early and Late Repair

Michael A Paul¹, Frank Cetta², Carol L Suzuki¹, Robert C Lichtenberg¹. ¹Loyola University Medical Center, Maywood, IL; ²Mayo Clinic, Rochester, MN

P1-34 Prediction of the Prognosis in Small Animal Model of Congestive Heart Failure (Hamster UMX 7) Using Tei Index

Bo Yu, Yutaka Otsuji, Yoshiyuki Ikeda, Yoshiyuki Kamogawa, Shiro Yoshifuku, Takeshi Uemura, Hui Zhang, Kenichi Nakashiki, Toshinori Yuasa, Kunitugu Takasaki, Sadatoshi Biro, Shinichi Minagoe, Chuwa Tei. Kagoshima University School of Medicine, Kagoshima City, Japan

P1-35 Do Cardiac Function and Exercise Performance Change in Obese Children Following Participation in a Weight Loss Program?

Holly M Ippisch, Sandra A Witt, Betty J Glascock, Wayne Mays, Sandy Knecht, Yvette Forment, Randal Claytor, Timothy K Knilans, Stephen R Daniels, Thomas R Kimball. Cincinnati Children's Hospital, Cincinnati, OH

P1-36 Transthoracic Three-Dimensional Echocardiography Enhances Evaluation of Native and Postoperative Aortic Arch Abnormalities

Jon F Lucas, Girish S Shirali, Karen Chessa. Medical University of South Carolina, Charleston, SC

P1-37 Prenatal Screening for Congenital Heart Disease Using Real-Time Three-Dimensional Echocardiography

Mark Sklansky¹, David Miller², Dolores Pretorius³, Gregory DeVore⁴, Pierre Wong¹. ¹Children's Hospital Los Angeles, Los Angeles, CA; ²University of Southern California, Los Angeles, CA; ³University of California, San Diego, San Diego, CA; ⁴Fetal Diagnostic Centers, Pasadena, CA

P1-38 Noninvasive Quantitation of Right and Left Ventricular Function in the Fetus with Peak Systolic Strain Rate Derived for Color Tissue Doppler Imaging

Linda B Pauliks, Susan Miller, Anirban Banerjee. Tufts-New England Medical Center, Boston, MA

Interventional Echocardiography: TEE, Intraoperative, Intravascular

Posters P1-39–P1-47

- P1-39** **Ultrasound Enhances Drug Release from Non-ionic Surfactant Vesicles**
Elizabeth Hood, Monica Gonzalez, Joel Strom, Michael VanAuken. University of South Florida, Tampa, FL
- P1-40** **Comparison Between Successful and Failure Mitral Valve Repair in Ischemic Mitral Regurgitation: An Intraoperative Echocardiographic Study**
Vorachai Kongsarepong, Jian Xin Qin, Jong-Min Song, Maiko Shiota, Patrick M McCarthy, A. Marc Gillinov, John-Han Shin, Timothy Williams, Delos M. Cosgrove, James D. Thomas, Takahiro Shiota. Cleveland Clinic Foundation, Cleveland, OH
- P1-41** **Intracardiac Echocardiography via the Right Internal Jugular Vein is Safe and Opens up a new Diagnostic Window to the Heart and the Ascending Aorta**
Thomas Bartel¹, Heinz Koertke², Holger Eggebrecht¹, Thomas Konorza¹, Raimund Erbel¹. ¹University Essen, Essen, Germany; ²Heart Center, Bad Oeyenhausen, Bad Oeyenhausen, Germany
- P1-42** **Poor Reproducibility of Pulmonary Venous Diastolic Deceleration Time: Does Transthoracic Echo Measurement Accurately Predict Transesophageal Data?**
Swaminatha V Gurudevan, Bruno Cotter, Thomas G Waltman, Ajit B Raisinghani, Sally G Tamayo, Anthony N DeMaria, Daniel G Blanchard. UCSD School of Medicine, San Diego, CA
- P1-43** **Evaluation of Cardiopulmonary Bypass (CPB) and Aortic Cross Clamp (ACC) Time Duration on The Index of Myocardial Performance (IMP) in Adult Patients Undergoing Coronary Artery Bypass Graft Surgery with Normal Pre-operative Left Ventricular (LV) Function**
Ajeet D Sharma, Antoine Al-Achi, John C Lucke, John Kelemen, Anil K Sharma, Peter McKeown. Asheville VA Medical Center, Asheville, NC
- P1-44** **The Effect of Pericardiotomy on Left Ventricular Diastolic Myocardial Tissue Velocity**
N Skubas, N Ryjnikov, R Slepian, S Levin, L Girardi, K Krieger, P A Tunick, I Kronzon. NYU School of Medicine, New York, NY
- P1-45** **Continuous Left Ventricular Volumetry by Intracardiac Echocardiography**
Chuxiong Ding, Liyun Rao, Sherif F Nagueh, Dirar S Khoury. Baylor College of Medicine, Houston, TX
- P1-46** **Comparison of Left and Right Atrial Stunning After Conversion of Chronic Atrial Fibrillation to Sinus Rhythm**
Hirotsugu Yamada, Nasir F Marrouche, Andrea Natale, James D Thomas, Richard A Grimm. Cleveland Clinic Foundation, Cleveland, OH
- P1-47** **Value of D-dimer for Evaluation of Left Atrial Thrombus before Percutaneous Transvenous Mitral Commissurotomy**
Piroon Chularojanamontri, Sukit Yamwong, Piyamitr Sritara, Supachai Tanomsup, Kalayane Atamasirikul, Oraporn Sriwattanakomen. Ramathibodi Hospital, Bangkok, Thailand

Ventricular & Atrial Function (I)

Posters P1-48–P1-60

- P1-48** **Echocardiographic Measurements in Apparently Healthy Young Adults: A Proposed Normative Database Derived From 12,127 Males and 1,126 Females**
Ants Palm-Leis, Thomas Harrell, Alvin Antonio, William B Krueyer. Aeromedical Consultation Service, Brooks City Base, TX

- P1-49** **Quantification of Left Atrial Function by Strain Rate Imaging in Healthy Subjects and in Patients with Paroxysmal Atrial Fibrillation**
Yoshie Inaba, Satoshi Yuda, Noriyuki Fujii, Naoko Kobayashi, Akiyoshi Hashimoto, Kikuya Uno, Tomoaki Nakata, Kazufumi Tsuchihashi, Kazuaki Shimamoto. 2nd Department of Medicine, Sapporo Medical University, Sapporo, Hokkaido, Japan
- P1-50** **Tissue Doppler Assessment of Left Atrial Appendage Wall Dynamics and its Correlation to Pulsed Doppler Flow Velocities by Transesophageal Echocardiography**
Lakshmi Parvathaneni, Jo Mahenthiran, William J Gill, Judy Foltz, Crystal Williamson, Waqas Ghumman, Irmina Gradus-Pizlo, Harvey Feigenbaum, Stephen G Sawada. Indiana University, Indianapolis, IN
- P1-51** **How Left Atrial Ejection Force Should be Evaluated?**
Banthit Khankirawatana, Suwanee Khankirawatana. University of Nebraska Medical Center, Omaha, NE
- P1-52** **What is the Stimulus for BNP Elevation? Echocardiographic Insights**
Craig S Vinch¹, Jeffrey C Hill², Giridhar Logsetty², Dennis A Tighe¹, Theo E Meyer², Gerard P Aurigemma¹. ¹UMASS Medical School, Worcester, MA; ²Harvard Medical School, Boston, MA
- P1-53** **Flow Velocities In The Left Atrial Appendage Are Variable Depending On The Plane And Site Of Measurement**
Kameswari Maganti, Salvatore Di Rosa, Jeffrey J Goldberger, Vera H Rigolin. Northwestern University, Chicago, IL
- P1-54** **Index of Myocardial Performance is Preload Dependent but not Heart Rate Dependent in the Dysfunctional Left Ventricle**
Steven J Lavine. University of Florida/Jacksonville, Jacksonville, FL
- P1-55** **Left Atrial Appendage Strain Rate Derived from Tissue Doppler: An Alternative Index for Assessing Left Atrial Appendage Function**
Suwanee Khankirawatana, Banthit Khankirawatana. University of Nebraska Medical Center, Omaha, NE
- P1-56** **New Insights into Left Ventricular Systolic Dyssynchrony: Dyssynchrony at Pre-ejection Period and that at Ejection Period**
Takeshi Maruo¹, Satoshi Nakatani¹, Takuya Hasegawa¹, Hideaki Kanzaki¹, Masafumi Kitakaze¹, Tohru Ohe², Kunio Miyatake¹. ¹National Cardiovascular Center, Osaka, Japan; ²Okayama University Graduate School of Medicine, Okayama, Japan
- P1-57** **Effect of Moderate-Intensity Exercise Training on Systolic and Diastolic Indexes of Left Ventricular Function in Young Male Individuals**
Ana Clara T Rodrigues¹, Joicyly M Costa¹, Guilherme B Alves¹, Michael H Picard², Carlos E Negrao¹, Wilson Mathias, Jr.¹, Jose L Andrade¹. ¹Heart Institute (InCor), Sao Paulo-SP, Brazil; ²Massachusetts General Hospital-Harvard Medical School, Boston, MA
- P1-58** **Validation of a 13-Segment Wall Motion Score Index for the Detection of Left Ventricular Dysfunction in Rats**
Eric E Morgan¹, Michael D Faulx², Tracy A McElfresh¹, Theodore A Kung¹, Margaret P Chandler¹, William C Stanley¹, Brian D Hot¹. ¹Case Western Reserve University, Cleveland, OH; ²University Hospitals of Cleveland and Case Western Reserve University, Cleveland, OH
- P1-59** **Tissue Doppler Echocardiography Reveals Increased Left Ventricular and Left Atrial Systolic Velocities after Haemodialysis**
Samir K Saha¹, Satish C Govind², Miguel Quintana¹, K N Aruri², Britta Lind¹, Simin Roumina¹, Lars-Åke Brodin¹. ¹Karolinska University Hospital, Stockholm, Sweden; ²BMJ Heart Centre, Bangalore, India
- P1-60** **Two Dimensional Assessment of Right Ventricular Function**
Nagesh S Anavekar, David Gerson, Raymond Y Kwong, Kent Yucel, Scott D Solomon. Brigham & Women's Hospital, Boston, MA

Educational Objective: To obtain insights into the latest in cardiovascular research and applications of echocardiography.

Monday, June 28

Luncheon Symposia

12:15 pm-1:15 pm

Room 20 A-C

G3 – Special Session

Advocacy Update: ASE Working For You

*Chairs: Benjamin F. Byrd, III, MD
Alan S. Pearlman, MD, FASE
Diane Millman, Esq.
(open to all attendees)*

Educational Objective: To familiarize the attendee with coding, reimbursement, and legal issues affecting the cardiology profession.

12:15 pm-1:15 pm

Room 20 D

A3 – Special Session

Joint Session with WHAG: Echo from “Womb to Tomb”

*Chairs: Sharonne N. Hayes, MD, FASE
Judy Rosenbloom, RDCS, FASE*

12:15 pm-12:30 pm

“The Red Dress” Heart Disease in Women and ASE

Sharonne N. Hayes, MD, FASE

12:30 pm-12:45 pm

Assessment of Vascular Health in Women

Tasneem Z. Naqvi, MD, FASE

12:45 pm-1:00 pm

Women with Heart Failure and Normal Ejection Fraction

Nancy K. Sweitzer, MD, PhD

1:00 pm-1:15 pm

Two Patients at Once: Maternal and Fetal Echocardiography

Jack Rychik, MD

Educational Objective: Upon completion of this session, participants will appreciate the impact of echocardiography on women’s cardiovascular health issues.

12:15 pm-1:15 pm

Room 33

H3 – Meet the Experts/How To

Hand-Carried Ultrasound

*Chairs: James B. Seward, MD, FASE
Anthony N. DeMaria, MD, FASE*

12:15 pm-12:30 pm

Hand-Carried Ultrasound: State-of-the-Art

Jos Roelandt, MD

12:30 pm-12:45 pm

Use of “Quick-Look” Echo for Clinical Decision-Making

Kirk T. Spencer, MD, FASE

12:45 pm-1:00 pm

Novel Approaches of Hand-Carried Ultrasound

Junichi Yoshikawa, MD

1:00 pm-1:15 pm

Expanding Role in the Out-Patient Setting

Martin E. Goldman, MD

Educational Objective: Upon completion of this session, participants will become familiar with hand-carried ultrasound and its clinical impact.

12:15 pm-1:15 pm

Room 30 C-E

S3 – Sonographer Council Luncheon

How To Utilize Proper Ergonomic Scanning: Have Fun Without Hurting Yourself

*Moderators: Sally P. Moos, RDCS, FASE
Janel M. Mays, BA, RN, RDCS*

*Presenters: Serena Michelle Bierig, MPH, RDCS
Merri Bremer, BSN, RN, RDCS, FASE*

Educational Objective: Upon completion of this session, attendees will be aware of sonographer scanning techniques to minimize the risk of sustaining occupation-related injuries.

12:15 pm-1:15 pm

Room 30 A-B

CC3 – Core Curriculum

Echoes that Meet or Beat the ASE and ICAEL Standards: A How-To

*Chairs: Richard A. Humes, MD
Laura M. Perrotta, BS, RDCS*

12:15 pm-12:30 pm

The Technical Protocol: How Much is Enough?

Rick Rigling, BS, RDCS, FASE

12:30 pm-12:45 pm

Representative Cases: Doing Them Right

Kenneth D. Horton, RGS, RDCS, FASE

12:45 pm-1:00 pm

Aortic Stenosis: From the Top

Annette C. Smith, RDCS, APS, FASE

1:00 pm-1:15 pm

The Standardized Echo Report: Is Yours Compliant?

Timothy P. Obarski, DO

Educational Objective: Upon completion of this session, participants will have a solid understanding of what is required to meet ICAEL protocol, case and reporting requirements for accreditation.

12:15 pm-1:15 pm

Room 29

PE3 – Pediatric Echocardiography Council Luncheon

State-of-the-Pediatric Council, Initiatives New and Old

*Chairs: Peter C. Frommelt, MD
Jack Rychik, MD*

Presentation

Jack Rychik, MD

Founder's Award Lecture

*Stephen P. Sanders, MD
(Open to all attendees)*

1:15-1:30 pm

Break

*ATTENDEES ARE INVITED TO VISIT EXHIBITS AND
REFRESHMENT AREA ON THE EXHIBIT FLOOR*

Concurrent Sessions

1:30 pm-3:00 pm

Room 20 A-C

G4 – Disease Focus

Heart Failure 2: Cardiomyopathies

*Chairs: Arthur E. Weyman, MD, FASE
L. Leonardo Rodriguez, MD*

1:30 pm-1:55 pm

Spectrum of Hypertrophic Cardiomyopathy: Whom to Treat ... How to Treat?

Harry Rakowski, MD, FASE

1:55 pm-2:15 pm

Applications of New Echo Technologies for Hypertrophic Cardiomyopathy

Sherif F. Nagueh, MD

2:15 pm-2:35 pm

Hypertensive Hypertrophic Cardiomyopathy of the Elderly: An Update

Craig Asher, MD

2:35 pm-2:55 pm

The Athlete's Heart: Implications for Sudden Death

Roberto M. Lang, MD, FASE

Educational Objective: Upon completion of this session, participants will be familiar with the spectrum of hypertrophic cardiomyopathy, hypertensive hypertrophic cardiomyopathy of the elderly and the athlete's heart.

1:30 pm-3:00 pm

Room 20 D

A4 – Cases

Studies in the Critically Ill/ Pericardial Disease/ Unknowns

Chair: William F. Armstrong, MD

Case Presenters:

John S. Gottdiener, MD, FASE

Nozomi Watanabe, MD

David A. Orsinelli, MD

Edward A. Geiser, MD, FASE

William F. Armstrong, MD

David Bach, MD

Educational Objective: In this session participants will interact with faculty on interesting and educational diagnostic cases of the critically ill, pericardial disease, and unknowns.

1:30 pm-3:00 pm

Room 33

X4 – Meet the Experts/How To

Tissue Doppler and Strain to Quantify Ventricular Function

Chairs: Marek Belohlavek, MD, PhD

Thomas Bartel, MD

1:30 pm-1:45 pm

Assessment of Acute Ischemia: An Overview

Genevieve Derumeaux, MD, PhD

1:45 pm-2:00 pm

New Insights about Myocardial Function

Cristina Pislaru, MD

2:00 pm-2:15 pm

The Diabetic Patient

Thomas H. Marwick, MD, PhD

2:15 pm-2:30 pm

Assessment of Cardiomyopathy and Heart Failure

Denis Pellerin, MD

2:30 pm- 2:45 pm

Hypertrophic Cardiomyopathy and the Athletic Heart: How Do I Tell the Difference?

Satoshi Nakatani, MD, PhD

2:45 pm-3:00 pm

Why Should We Measure Isovolumic Acceleration?

Michael Vogel, MD

Educational Objective: Upon completion of this session, participants will appreciate the evolving role of echocardiographic tissue Doppler and strain to quantify ventricular function.

Monday, June 28

1:30 pm-3:00 pm

Room 31

D4 – Controversies/Debates

Debate: Echo-Doppler Assessment of Diastolic Function

Chair: Steven A. Goldstein, MD

1:30 pm-1:50 pm

Pro: Echo-Doppler Assessment of Diastolic Function is Important in Every Patient

James D. Thomas, MD

1:50 pm-2:10 pm

Con: Echo-Doppler Assessment of Diastolic Function is Useless

Sanjiv Kaul, MD, FASE

Educational Objective: Upon completion of this session, participants will appreciate differing viewpoints on the role of Doppler echocardiography and diastolic function.

1:30 pm-3:00 pm

Room 30 C-E

S4 – Sonographer Track

The Heart Failure “Epidemic”: What Sonographers Now Need to Know

Chairs: Randolph P. Martin, MD
Cassie Margaret Robbins, RDCS, FASE

1:30 pm-2:00 pm

Overview on Heart Failure and the Role Echo Plays in Diagnosis and Treatment

Randolph P. Martin, MD

2:00 pm-2:30 pm

Bi-V Pacing and Resynchronization: The Sonographer’s Perspective

Deborah A. Agler, RCT, RDCS, FASE

2:30 pm-3:00 pm

Diastolic Function Assessment: What Clinicians Want from the Echocardiogram

Steve Ommen, MD

Educational Objective: To review the spectrum of etiologies causing heart failure and to acquaint the sonographer with newer techniques used in the assessment of resynchronization therapy and diastolic function.

1:30 pm-3:00 pm

Room 30 A-B

CC4 – Core Curriculum

Physics 200: Doppler and Beyond

Chairs: Linda D. Gillam, MD, FASE
Priscilla J. Peters, BA, RDCS, FASE

1:30 pm-3:00 pm

From Astronomers to Bubbles: The Physics behind Doppler and Contrast Echocardiography

Sidney K. Edelman, PhD

Educational Objective: Upon completion of this session, participants will understand:

- 1) Basic ultrasound physics as applied to Doppler echocardiography.
- 2) The physics of ultrasound contrast agents and bubble imaging techniques.

1:30 pm-3:00 pm

Room 29

PE4 – Pediatric Track

Pediatric “Echo Bowl”

Moderator: Michael Brook, MD

South Team:

Howard P. Gutgesell, MD

Jennifer S. Li, MD

Midwest Team:

Jeffrey Smallhorn, MBBS, FRACP, FRCP(C)

Luciana Pagotto-Young, MD

West Team:

Norman H. Silverman, MD, FASE

Theresa A. Tacy, MD

Educational Objective: Upon completion of this session, participants will have had the opportunity to review multiple cases of pediatric congenital and acquired heart disease that emphasize classic echocardiographic findings and illustrate key echocardiographic features that allow rapid recognition of common and uncommon heart lesions.

3:00 pm-3:30 pm

Break

ATTENDEES ARE INVITED TO VISIT THE EXHIBIT FLOOR FOR REFRESHMENTS

Concurrent Sessions

3:30 pm-5:00 pm

Room 20 (A-C)

G5 – Disease Focus

Echo in Advanced Heart Failure

Chairs: Mani A. Vannan, MBBS

Harry Rakowski, MD, FASE

3:30 pm-3:50 pm

Imaging the Dysfunctional Pump: What Does the Clinician Expect From an Imager?

Jagat Narula, MD

3:50 pm–4:05 pm

Resynchronization Therapy: Mechanics and Mechanisms

John Gorcsan, III, MD, FASE

4:05 pm–4:20 pm

Device Therapy for Heart Failure: An Electrophysiologist's Perspective

Mark A. Wood, MD

4:20 pm–4:35 pm

Echo in Advanced Heart Failure: From Transplant to Mechanical Support

Mario J. Garcia, MD

4:35 pm–4:55 pm

Novel Surgical Therapy for Advanced Heart Failure

Patrick M. McCarthy, MD

Educational Objective: Upon completion of this session, participants will be familiar with clinical applications of echocardiography in advanced heart failure including resynchronization and device therapy, transplantation, mechanical support and novel surgical therapy.

3:30 pm–5:00 pm

Room 20 D

A5 – Pediatric Track

Illustrative Cases in Pediatric Echo

Chair: Peter C. Frommelt, MD

Presenters:

Holly M. Ippisch, MD

Timothy M. Cordes, MD

Michael Earing, MD

Michael Puchalski, MD

Carolyn A. Altman, MD, FASE

David Parra, MD

Educational Objective: Upon completion of this session, participants will be able to better understand the approach to diagnosing challenging and complex cases in pediatric echocardiography.

3:30 pm–5:00 pm

Room 33

X5 – Meet the Experts/How To

Echo in Optimal Management of Hypertension

Chairs: Jonathan F. Plehn, MD

Jonathan N. Bella, MD

3:30 pm–3:50 pm

Contemporary Approach to Hypertension

Michael Ziegler, MD

3:50 pm–4:10 pm

Importance of Left Ventricular Hypertrophy: Lessons Learned from Clinical Trials

John S. Gottdiener, MD, FASE

4:10 pm–4:30 pm

Heart Failure with Preserved EF: Is it Diastolic Heart Failure?

Petros Nihoyannopoulos, MD

4:30 pm–4:50 pm

Is There a Screening Role for Hand-Carried Ultrasound?

Bruce J. Kimura, MD

Educational Objective: Upon completion of this session, participants will be familiar with echo in optimal management of hypertension including a contemporary approach to hypertension, importance of left ventricular hypertrophy, heart failure with preserved EF and the role of hand-carried ultrasound.

3:30 pm–5:00 pm

Room 31

D5 – Controversies/Debates

Debate: Doppler Techniques Can Accurately Predict Filling Pressures in Patients with Normal Ejection Fraction

Chair: Brian D. Hoit, MD, FASE

Pro: Sherif F. Nagueh, MD

Con: Michael S. Firstenberg, MD

Educational Objective: Upon completion of this session, participants will appreciate differing viewpoints concerning the ability of Doppler techniques to predict filling pressures in patients with normal ejection fraction.

3:30 pm–5:00 pm

Room 30 C-E

S5 – Sonographer Track

The Adult with Congenital Heart Disease: The Sonographer's Challenge

Chairs: Betty J. Glascock, RDCS, FASE

Daniel J. Murphy, MD

3:30 pm–4:00 pm

Who Should Care for the Adult with Congenital Heart Disease? Adult Program vs. Pediatric Program: Current Recommendations

Daniel J. Murphy, MD

4:00 pm–4:30 pm

Where to Begin? Expecting the Unexpected in the Adult with Congenital Heart Disease

Kimberly Moore, RDCS

4:30 pm–5:00 pm

Interesting Cases of Adults with Congenital Heart Disease: Surgical Explanation and Follow-Up

John H. Toptine, RCS, RDCS

Educational Objective: Upon completion of this session, participants will recognize morphologic characteristics of the variety of adult congenital heart disease, develop a systematic echocardiographic approach to these anomalies, and understand surgical interventions used for the treatment of congenital heart disease.

Monday, June 28

3:30 pm–5:00 pm

Room 30 A-B

CC5 – Core Curriculum

Cardiac Anatomy and Physiology: What Makes Blood Move

Chairs: Jeffrey C. Hill, BS, RDGS
Morgan S. Werner, MD

3:30 pm–4:00 pm

The Heart as a Pump

Marcus F. Stoddard, MD

4:00 pm–4:30 pm

The Wiring System—ECG's and Electrophysiology for Beginners

Steve Ommen, MD

4:30 pm–5:00 pm

Hemodynamics

Cris D. Gresser, RN, RDGS, FASE

Educational Objective: Upon completion of this session, participants will understand

1. Basic cardiac anatomy and physiology (the role of the myocardium, valves and conducting system).
2. Basic cardiovascular hemodynamics (pressure and flow).

Special Session

3:30 pm–5:00 pm

Room 32

H5 – Special Sessions

ICAEL: Quality Assurance in the Echo Lab

Moderator: Richard A. Humes, MD
Presenters: Rick Rigling, BS, RDGS, FASE
Timothy P. Obarski, DO

Educational Objective: 1) Recognize the value of developing a comprehensive quality assurance program and its relationship to the accreditation process; 2) Review ideas and suggestions for setting up a peer review program to analyze echocardiography quality for both the technical and interpretative aspects of the examination.

3:30 pm–5:00 pm

Room 29

PE5 – Special Sessions Track

Local Society Echo Challenge

Host: James V. Talano, MD, MM
Defending Champion:
New York Echocardiography Society

Watch our local echo societies from across the United States compete to be the 2004 Echo Challenge Champion. Echo Challenge is a fun and educational way to review echocardiography. In Echo Challenge local societies will present their best and most difficult echo-related studies in an attempt to stump their colleagues. (open to all attendees)

Educational Objective: Upon completion of this session, participants will have had the opportunity to review multiple cases that emphasize classic echocardiographic findings and illustrate key cardiovascular features that allow rapid recognition of common and uncommon heart ailments.

Abstract Poster Session 2

Exhibit Halls D, E

Presented: 2:00 pm–5:00 pm

Moderated: 3:30 pm–5:00 pm

Moderators: 1. Nelson B. Schiller, MD
2. Louis Andrew Nassef, Jr., MD

Ischemic Heart Disease: Rest and Stress

Moderated Posters P2-01–P2-12

P2-01 Relationship Between Myocardial Ischemia Assessed by Stress Echocardiography and Implantable Cardioverter Defibrillator Therapy in Patients with Coronary Heart Disease

Abdou Elhendy, John R. Windle, Thomas R. Porter. University of Nebraska Medical Center, Omaha, NE

P2-02 Impact of Improvement in Global Left Ventricular Systolic Function On Long-term Outcome in Patients with Ischemic Ventricular Dysfunction
Irshad Alam, Jo Mahenthiran, Irmira Gradus-Pizlo, Masoor Kamallesh, Adam Greene, Harvey Feigenbaum, Stephen G. Sawada. Indiana University, Indianapolis, IN

P2-03 Accentuated Postsystolic Thickening in a Subendocardial Myocardial Layer Characterizes Progressive Myocardial Ischemia: An Experimental Intracardiac Echocardiography Study

Jianwen Wang, Josef Korinek, Stig Urheim, Eileen McMahon, Theodore P. Abraham, Marek Belohlavek. Mayo Clinic Rochester, Rochester, MN

P2-04 A Decrease in Regional Myocardial Work Measured by Novel Strain Rate Echocardiography Correlates with Ischemic Inhibition of Myocardial Energetics Characterized by ATP and GTP Levels

Josef Korinek, Jianwen Wang, Stig Urheim, Petras Dzeja, Eileen McMahon, Theodore Abraham, Andre Terzic, Marek Belohlavek. Mayo Clinic, Rochester, MN

- P2-05 Regional Myocardial Contraction and Perfusion in Flow-Limiting Coronary Stenosis: Assessment by Tissue Strain and Myocardial Contrast Echocardiography**
Kohei Okuda, Toshihiko Asanuma, Takashiro Hirano, Kasumi Masuda, Ayako Miki, Kentaro Otani, Fuminobu Ishikura, Shintaro Beppu. School of Allied Health Sciences, Faculty of Medicine, Osaka University, Suita, Japan
- P2-06 Myocardial Performance Index is Useful in Evaluating Acute Right Ventricular Myocardial Infarction**
Anand Chockalingam, S Venkatesan, G Gnanavelu, R Alagesan, T Subramaniam, V Jagannathan, S Elangovan, P Sukumar. Madras Medical College & Research Institute, Chennai, India
- P2-07 Cost Effectiveness of Various Testing Strategies in Patients with Known or Suspected Coronary Artery Disease: A Stress Echo Study**
Sripal Bangalore, Siu-Sun Yao, Farooq A Chaudhry. St Lukes-Roosevelt Hospital Center, New York, NY
- P2-08 Role of Dobutamine Stress Echocardiography in Predicting the Long-term Outcome of Patients with Diabetes Mellitus**
Nithima Chaowalit, Ana Lucia Arruda, Kent R Bailey, Lynn H Urban, Robert B McCully, Patricia A Pellikka. Mayo Clinic, Rochester, MN
- P2-09 Clinical Factors are More Important Than Dobutamine Echocardiography in Predicting Outcome in Patients With Ischemic Ventricular Dysfunction and Multiple Comorbid Conditions**
Sabeena Ramrakhiani, Mark Fisch, Waqas Ghumman, Jo Mahenthiran, Irmina Gradus-Pizlo, Firas Barrow, Masoor Kamalesh, Adam Greene, Harvey Feigenbaum, Stephen G. Sawada. Indiana University School Medicine, Indianapolis, IN
- P2-10 Ventricular Untwisting Velocity is Enhanced During Exercise**
Yuichi Notomi, Takahiro Shiota, Dimitri Desserrano, Neil L Greenberg, Mario J Garcia, James D Thomas. Cleveland Clinic Foundation, Cleveland, OH
- P2-11 Chronotropic Response after Dipyridamole Correlates with Increased AI-700 Echo and Nuclear Perfusion Sensitivity in Patients Screened for Coronary Disease**
Neil J Weissman¹, Paul A Grayburn², William A Zoghbi³, Allan L Kleinf⁴, Richard C Walovitch⁵, Michael H Picard⁶. ¹Washington Hospital Center, Washington, DC; ²Baylor Heart & Vascular Institute, Dallas, TX; ³Baylor College of Medicine, Houston, TX; ⁴Cleveland Clinic, Cleveland, OH; ⁵Acusphere, Inc., Watertown, MA; ⁶Massachusetts General Hospital, Boston, MA
- P2-12 Incidence of Cerebral Embolism after Cardioversion of Atrial Fibrillation-A Prospective Study Using Transesophageal Echocardiography and Cerebral MRI**
Peter Bernhardt¹, Christoph Hammerstingl¹, Harald Schmid², Berndt Lüderitz³, Heyder Ommar⁴. ¹University of Bonn-Department of Medicine-Cardiology, Bonn, Germany; ²St-Marien-Hospital Bonn, Bonn, Germany

- P2-14 Quantitative Myocardial Contrast Echo is Accurate for Detection Coronary Artery Disease During Stress Echocardiography**
Stuart Moir, Brian Haluska, Carly Jenkins, Thomas H Marwick. University of Queensland, Brisbane, Australia
- P2-15 Myocardial Contrast Echocardiography is a Powerful Long-term (up to 66 Months) Predictor for Hard Cardiac Events in Patients at Low, Intermediate and High Risk for Coronary Artery Disease**
Alvaro Moraes, Flavio C Palheiro, Marcia Carrinho, Alexandre B Martins, Flavia Brasil, Renato Morcerf, Antonio Carlos Nogueira, Caio Medeiros, Fernando Morcerf. ECGOR-Centro de Diagnóstico Cardiovascular, Rio de Janeiro, Brazil
- P2-16 Myocardial Contrast Echocardiography for the Detection of Myocardial Viability Following Myocardial Infarction: A Comparison with Gated Single Photon Emission Computed Tomography**
Michael Hickman, Rajesh Janardhanan, Girish Dwivedi, Leah Burden, Roxy Senior. Northwick Park Hospital, London, United Kingdom
- P2-17 Primary Coronary Stenting Versus Coronary Stenting After Thrombolysis in Patients With Acute Myocardial Infarction: Impact on Microvascular Damage and Left Ventricular Functional Recovery**
Luciano Agati, Mariapina Madonna, Flavia Celani, Stefania Funaro, Giulia Benedetti. La Sapienza University of Rome, Rome, Italy
- P2-18 Independent Role of Microvascular Perfusion in Early and Late Left Ventricular Remodeling in Reperfused Acute Myocardial Infarction**
Luciano Agati¹, Stefania Funaro², Mariapina Madonna¹, Flavia Celani¹. ¹La Sapienza University of Rome, Rome, Italy; ²San Giuseppe Hospital, Cairo Mite, Savona, Italy
- P2-19 A New Ultrasound Contrast Agent Dilution Method for EF Quantification**
Massimo Mischl¹, Annemieke H M Jansen², Ton A Kalker³, Erik H Korsten⁴. ¹Technical University Eindhoven, Eindhoven, Netherlands; ²Catharina Hospital Eindhoven, Eindhoven, Netherlands
- P2-20 Use of Parametric Imaging in Myocardial Contrast Echocardiography during Vasodilator Stress**
Joseph A Lodato, Kirk T Spencer, Keith A Collins, James E Bednarz, Kathleen T Furlong, Roberto M Lang, Jeanne M DeCara. University of Chicago, Chicago, IL
- P2-21 Contrast Echocardiography Improves the Diagnostic Yield of Transthoracic Studies Performed in the Intensive Care Setting by Novice Sonographers**
Amgad N Makaryus¹, Linda D Gillam², Nickolaos Michelakis³, Lawrence Phillips⁴, Safi Ahmed⁵, David Friedman⁶, Cristina Sison⁷, Smadar Kort⁸, David Rosman⁹, Judy R Mangione¹⁰. ¹North Shore University Hospital, Manhasset, NY; ²Hartford Hospital, Hartford, CT
- P2-22 Assessment of Myocardial Perfusion by Contrast Echocardiography Predicts Functional Recovery in Patients with Non-ST-Elevation Myocardial Infarction Early after Revascularization**
Grigorios Korosoglou, Alexander Hansen, Nina Labadze, Christiane Selter, Evangelos Giannitsis, Hugo Katus, Helmut Kuecherer. University of Heidelberg, Heidelberg, Germany
- P2-23 Head to head comparison of quantitative adenosine and dobutamine stress real time myocardial contrast echocardiography. Preliminary results.**
Ingrid Kowatsch, Altamiro F F Osorio, Maria L Hannouche, Juliana C Frizzera, Jeane M Tsutsui, Marden L Lopes, Jose L Andrade, Jose F Ramires, Wilson Mathias, Jr. InCor FMUSP, São Paulo, Brazil

Contrast Echocardiography: Techniques & Applications (II)

Posters P2-13-P2-24

- P2-13 Assessment of Infarct Size Using Real-time Myocardial Contrast Echocardiography**
Marek Orban¹, Petr Tousek², Marcus Schwaiger³, Stefan Martinoff⁴, Albert Schomig⁵, Christian Firschke⁶. ¹I. Internal Dpt, St. Anna's University Hospital, Brno, Czech Republic; ²III. Internal Dpt, University Hosp Kralovske Vinohrady, Prague, Czech Republic; ³Dpt. of Radiology, Klinikum Rechts der Isaar, Munich, Germany; ⁴Deutsches Herzzentrum, Klinikum Rechts der Isaar, Munich, Germany
- P2-24 Estrogen Overcome the Harmful Effect of Active Smoking on the Coronary Microcirculation in Healthy Young Adults**
Kotaro Tokai, Yuji Kasamaki, Rie Wakita, Toshiko Nakai, Ichiro Watanabe, Shigeru Ogata, Satoshi Saito, Yukio Ozawa, Katsuo Kanmatsuse. The Second Department of Internal Medicine and Cardiology, Nihon University School of Medicine, Tokyo, Japan

3D Echocardiography: Techniques & Applications (I)

Posters P2-25–P2-35

P2-25 Matrix-array Real-Time Three-Dimensional Echocardiography Provides a Rapid, Simple and Accurate Assessment of Right Ventricular Volume and Function

Igal A Sebag¹, Ricardo C Cury², Godtfred Holmvang², Suhny Abbara², Lawrence G Rudski¹, David Langleben¹, Michael H Picard¹, Robert A Levine², Judy Hung². ¹Sir Mortimer B. Davis Jewish General Hospital, McGill University, Montreal, PQ, Canada; ²Massachusetts General Hospital, Harvard Medical School, Boston, MA

P2-26 Normal Values for Left Ventricular Volumes and Mass by Freehand Three-Dimensional Echocardiography

Michel G Khouri, Lyna El-Khoury Rumbarger, Mathew S Maurer, Donald L King. Columbia University, New York, NY

P2-27 Real-Time Three-Dimensional Echocardiography with and without Contrast in the Differential Diagnosis of Left Ventricular Apical Thrombi: Comparison with Two-Dimensional Echocardiography

Marti L McCulloch¹, Tony Tran², Miquel A Quinones², William A Zoghbi¹. ¹The Methodist Hospital, Houston, TX; ²Baylor College of Medicine, Houston, TX

P2-28 Non-Invasive Characterization of Aortic Compliance with Three-Dimensional Echocardiography

Lyna El-Khoury Rumbarger, Raja J Wajahat, Donald L King, Daniel Burkhoff, Mathew S Maurer. Columbia University, New York, NY

P2-29 Left Atrial function detected by Live 3D Echocardiography: in vivo validation

Stefano De Castro¹, Monica Beraldi¹, Stefano Caselli¹, Andrea Marcantonio¹, Elena Cavarretta¹, Emanuele Diangelantonio¹, Iacopo Carbone¹, Natesa Pandian², Francesco Fedele¹. ¹La Sapienza, University of Rome, Rome, Italy; ²TUFTS University, Boston, MA

P2-30 Dynamic Change in Mitral Annular Geometry During a Cardiac Cycle: Novel Computerized 3D Echo Method

Masao Daimon, Takahiro Shiota, Giuseppe Saracino, Niel Greenberg, James D Thomas. Cleveland Clinic Foundation, Cleveland, OH

P2-31 Dynamic Change in Angulation Between Aortic and Mitral Annular Plane: A Clinical Real-time 3D Echocardiographic Study with a Custom Made Novel Computer Technique

Giuseppe Saracino, Takahiro Shiota, Masao Daimon, James D Thomas. Cleveland Clinic Foundation, Cleveland, OH

P2-32 Immediate Changes of Mitral Apparatus and Hemodynamic after Annuloplasty Repair in Patient with Ischemic Mitral Regurgitation: 2D and 3D Echo Studies

Jian Xin Qin, Takahiro Shiota, John-Han Shin, Deborah A. Agler, Giuseppe Saracino, A. Marc Gillinov, Patrick M. McCarthy, James D. Thomas. The Cleveland Clinic Foundation, Cleveland, OH

P2-33 3D-Echocardiography for Serial Assessment of Left Ventricular Function in Mice with Chronic Heart Failure

Dana Dawson, Craig A Lygate, Karen Hulbert, Barbara Casadei, Harald H Becher, Stefan Neubauer. University of Oxford, Oxford, United Kingdom

P2-34 Left Ventricular Mass and Volume Decrease Following Aortic Valve Replacement: A Real-time Three-Dimensional Echocardiography Study

Deborah A Agler, Jian Xin Qin, Takahiro Shiota, Richard Troughton, John A Sallach, Kathleen Kassimatis, Gosta Pettersson, Brian Griffin, Richard Grimm, James D Thomas. The Cleveland Clinic Foundation, Cleveland, OH

P2-35 Accurate, Simplified and Rapid 3D-Echocardiographic Volume Quantifications: Comparison of Different Algorithms in Symmetric and Asymmetric Left Ventricular Geometry

Silvana Mueller¹, Thomas Barte¹, Michael Schocke¹, Raimund Erbe¹, Otmar Pachinger¹. ¹University Innsbruck, Innsbruck, Austria; ²University Essen, Essen, Germany

Diastolic Function (I)

Posters P2-36–P2-49

P2-36 Noninvasive Assessment of Right Ventricular Afterload with Tissue Doppler Imaging of the Tricuspid Annulus in Patients With Chronic Thromboembolic Pulmonary Hypertension

Swaminatha V Gurudevan, Philip Malouf, Laura Mortensen, George Mesa, Therese Romero, Anthony N DeMaria, Daniel G Blanchard. UCSD School of Medicine, San Diego, CA

P2-37 Angle-Corrected Tissue Displacement Imaging: A New Approach to Assess Regional Radial Early Diastolic Relaxation Abnormalities in Heart Failure

Kaoru Dohi, Hideaki Kanzaki, L. Elif Sade, Donald Severyn, Kathy Edelman, John Gorcsan, III. University of Pittsburgh, Pittsburgh, PA

P2-38 Cardiac Resynchronization Therapy did Not Improve Diastolic Function or Diastolic Synchronicity in Patients with Heart Failure

Cheuk-Man Yu¹, Qing Zhang¹, Jeffrey Wing-Hong Fung¹, Hong Lin¹, Shun-Ling Kong¹, Chi-Kin Chan², Yat-Sun Chan¹, Leo C C Kum¹, John Wong¹, Eugene B Wu¹, John E Sanderson¹. ¹The Chinese University of Hong Kong, Hong Kong, Hong Kong Special Administrative Region of China; ²Alice Ho Miu Ling Nethersole Hospital, Hong Kong, Hong Kong Special Administrative Region of China

P2-39 Flow Propagation Velocity is Lower in Patients with Systolic Heart Failure and Impaired Relaxation Pattern Compared to Pseudonormal or Restrictive Filling: Evidence of Preload Dependency

Hla-Yee Daw¹, Liang H Ling¹, Christopher P Appleton². ¹National University of Singapore, Singapore, Singapore; ²Mayo Clinic Scottsdale, Scottsdale, AZ

P2-40 Active Relaxation Time (ART), A New Noninvasive index of Diastolic Function that Correlate Strongly with Pulmonary Capillary Wedge Pressures

Samer J Khouri, Mohamed H Kanj, Jodi Tinkel, Thomas Walsh, Joseph Shapiro. Medical College of Ohio, Toledo, OH

P2-41 Abnormal Septal Motion Affects Early Diastolic Velocities At The Septal and Lateral Mitral Annulus, and May Impact On Estimation of The Pulmonary Capillary Wedge Pressure Using Tissue Doppler Imaging

Karen A D'Souza¹, Donald J Mooney¹, Andrew E Russell¹, Andrew I Maclsaac¹, Philip E Aylward², David L Prior¹. ¹St. Vincent's Hospital, Melbourne, Australia; ²Flinders Medical Centre, Adelaide, Australia

P2-42 Impact of Restoration of Normal Sinus Rhythm on Left Ventricular Diastolic and Left Atrial Function

Suwanee Khankirawatana, Banthit Khankirawatana. University of Nebraska Medical Center, Omaha, NE

P2-43 Diastolic Asynchrony as a Marker of Rejection in Children with Orthotopic Heart Transplantation

Padmini Varadarajan, Neda Mulla, Ranae Larsen, Ramdas G Pai. Loma Linda University Medical Center, Loma Linda, CA

P2-44 Time Interval between the onset of Mitral inflow and Mitral Annular Motion to Evaluate Left Ventricular Filling Pressure in Patients with Acute Myocardial Infarction

Keiji Ujino, Graham S Hillis, Mary E Hagen, Jae K Oh. Mayo Clinic, Rochester, MN

P2-45 Echocardiographic, Neurohormonal and Invasively Measured Correlates of Third and Fourth Heart Sounds Determined by Audioelectric Cardiography

Ivor L Gerber, Barry H McKeown, Michelle Huddleston, Mark Jordan, Kanu Chatterjee, Elyse Foster, Andrew Michaels. University of California San Francisco Medical Center, San Francisco, CA

P2-46 Growing Ventricular Untwisting in Childhood

Yuichi Notomi, Srinath Gowdagere, Takahiro Shiota, Neil L Greenberg, Adel Younoszai, James D Thomas. Cleveland Clinic Foundation, Cleveland, OH

P2-47 Color Tissue Doppler Consistently Underestimates Conventional (Spectral) Tissue Doppler in the Assessment of Diastolic Parameters

Hisham Dokainish, Marti McCulloch, Chris Thomas, Robert Davis, William A Zoghbi. Baylor College of Medicine, Houston, TX

P2-48 Tissue Doppler Imaging of the Right and Left Ventricle in Severe Obesity

Howard J Willens, Simon Chakko, Maureen H Lowery, Eugenio Labrador, Juan C Castrillon, Anthony J Gallagher, Javier Jimenez, Steve Fein, Patricia Byers. University of Miami School of Medicine, Miami, FL

P2-49 Doppler Estimation of Left Ventricular Filling Pressures in Patients with Mitral Valve Disease. A Novel Application for the Time Interval between Onset of Annular Ea and Mitral E Velocities

Abhinav Diwan¹, Marti McCulloch², Gerald M Lawrie², Michael J Reardon², Sherif F Nagueh¹. ¹Baylor College of Medicine, Houston, TX; ²Methodist DeBakey Heart Center, Houston, TX

Cardiomyopathies/Pericardial Diseases

Posters P2-50–P2-62

P2-50 Specific and Sensitive Enough to Reveal the Fruste Forms of Arrhythmogenic Right Ventricular Dysplasia

Ivana I Vranic, Miljko Ristic, Tijana Simic, Mladen Kocica. Institute for cardiovascular diseases Clinical Center of Serbia, Belgrade, Yugoslavia

P2-51 Exercise Echocardiography: A New Approach to Screen Patients for Cardiac Resynchronization Therapy

Stephane Lafitte, Pierre Bordachar, Stephane Garrigue, Sylvain Reuter, Valerie Lebouffes, Marianne Berrouet, Jacques Clementy, Raymond Roudaut. Hopital Cardiologique, Pessac, France

P2-52 Color M-mode Indices of Diastolic Function in patients with LV systolic Dysfunction are Dependent on LV Filling Pressures

Volkan Ozduran, Patrick J Nash, Richard Troughton, Allan L Klein. Cleveland Clinic Foundation, Cleveland, OH

P2-53 Right Ventricular Function is Preserved Following Left Ventricular Assist Device Insertion: A Pump Turndown Study

Allen G Borowski¹, Zoran Popovic¹, John A Sallach¹, Kathleen Kassamatis¹, Sheryl Kamis¹, Gardar Sigurdsson¹, Jane Grande-Allen², Patrick McCarthy¹, Mario Garcia¹. ¹The Cleveland Clinic Foundation, Cleveland, OH; ²Rice University, Houston, TX

P2-54 Doppler Evaluation of Pulmonary Regurgitation Facilitates the Diagnosis of Constrictive Pericarditis

Gregory Gilman, Sr., William H Hansen, Sr., Steve R Ommen, Sr. Mayo Clinic Rochester, Rochester, MN

P2-55 Apical Hypertrophic Cardiomyopathy: The Importance of Diastolic Dysfunction

Daniel Monakier, Anna Woo, Maria Eriksson, Michal Jamorski, Hua Yang, Douglas Wigle, Harry Rakowski. Toronto General Hospital, Toronto, ON, Canada

P2-56 Interrupted Contraction: Premature Termination of Mechanical Systole Caused by Obstruction in Hypertrophic Cardiomyopathy

Ivan Barac, Shreekant Upadja, Rob Pilchik, Eugene Shteerman, Michael Passick, Farooq A. Chaudhry, Mark Sherrid. St.Luke's-Roosevelt Hospital Center, New York, NY

P2-57 Impact of Thoracotomy with Pericardiectomy on Mitral Regurgitation and Valve Geometry in The Presence of Dilated Cardiomyopathy: A Real Time 3-Dimensional and 2-Dimensional Color Doppler Echocardiographic Study

Zoran Popovic, Maureen Martin, Kiyotaka Fukamachi, Masahiro Inoue, Soren Schenk, Takahiro Shiota, James D Thomas. Cleveland Clinic Foundation, Cleveland, OH

P2-58 Quantification of Regional Non-uniformity and Paradoxical Intramural Mechanics in Hypertrophic Cardiomyopathy by High Frame Rate Ultrasound Myocardial Strain Mapping

Partho P Sengupta¹, Vimal Mehta², Shantanu P Sengupta², Jagdish C Mohan², Bijoy K Khandheria¹. ¹Mayo Clinic, Rochester, MN; ²GB Pant Hospital, New Delhi, India

P2-59 Hypertrophy Severity Is An Important Determinant of Diastolic Dysfunction in Patients with Hypertrophic Cardiomyopathy

Hua Yang¹, Anna Woo¹, Michal Jamorski¹, Daniel Monakier¹, Katie Fedwick¹, Jing Ping Sun², E. Douglas Wigle¹, Harry Rakowski¹. ¹University Health Network, The University of Toronto, Toronto General Hospital, Toronto, ON, Canada; ²Cleveland Clinic Foundation, Cleveland, OH

P2-60 Tissue Doppler Methods to Predict Left Ventricular Reverse Remodeling after Cardiac Resynchronization Therapy: How many Segments is enough?

Annemieke H M Jansen, Jan melle van Dantzig, Frank Bracke, Albert Meijer, Erik H M Korsten, Kathinka H Peels. Catharina Hospital, Eindhoven, Netherlands

P2-61 Prediction of Exercise Capacity in Patients with Dilated Cardiomyopathy by a Combination of Pulsed and Strain Doppler Echocardiography

Takuya Hasegawa, Satoshi Nakatani, Takeshi Maruo, Hideaki Kanzaki, Masakazu Yamagishi, Masafumi Kitakaze, Kunio Miyatake. National Cardiovascular Center, Osaka, Japan

P2-62 Mitral Valve Coaptation Displacement Predicts Maximal Aerobic Capacity in Patients with Dilated Cardiomyopathy

Jan Kulhanek, Peter S Rakko, James H Stein, Ronald E Gagnon, Pamela S Douglas. University of Wisconsin Madison, Madison, WI

Educational Objective: To obtain insights into the latest in cardiovascular research and applications of echocardiography.

Special Event

5:00 pm-6:30 pm

President's Reception

Exhibit Hall D, E

ASE's outgoing president, Randolph P. Martin, MD will host this networking event. Food and beverages will be served on the exhibit floor. Foundation contributors and new FASE recipients will be honored. Open to all registered attendees. Tickets are also available for purchase for non-registrants/guests.

Tuesday, June 29

7:00 am-8:00 am

Continental Breakfast

Ballroom 20 Lobby, Upper Level East

7:00 am-6:30 pm

Registration

Level One Foyer-Hall D

10:00 am-5:00 pm

Exhibits Open

Halls D, E

7:00 am-4:30 pm

CyberSpASE Café Open

Grand Lobby

11:30 pm-1:30 pm

Box Lunches

Served in Exhibit Halls D, E (ticketed attendees only)

Tuesday, June 29

Concurrent Sessions

7:30 am-8:30 am

Room 30 A-B

CC6 – Core Curriculum

The Complete Echo Exam: Tips from the Experts

Chairs: Vera H. Rigolin, MD, FASE
Janel M. Mays, BA, RN, RDCS

7:30 am-7:50 am

The Basic Views -Echo Anatomic Correlates

David B. Adams, RDCS, FASE

7:50 am-8:10 am

Doppler Interrogation

Jane E. Marshall, BS, RDCS, FASE

8:10 am-8:30 am

The Fine Points: Special Views and Contrast

Janel M. Mays, BA, RN, RDCS

Educational Objective: Upon completion of this session, participants will know:

1. The echocardiographic imaging views that comprise the complete transthoracic echo exam and how to optimize the study.
2. How to perform a complete transthoracic Doppler exam.

7:30 am-9:30 am

Room 20 (A-C)

G 6 & 7 – Disease Focus

Disease of the Day: Aortic Valve Disease

Chairs: John S. Gottdiener, MD, FASE
Edward A. Geiser, MD, FASE

7:30 am-7:50 am

Aortic Stenosis: Pathophysiology and Echo-Doppler Assessment

Catherine M. Otto, MD

7:50 am-8:10 am

Aortic Stenosis: A Clinician's Contemporary Guide

Shahbudin Rahimtoola, MD

8:10 am-8:30 am

Is There a Role for Preventative Therapy in Aortic Stenosis?

Gian Novaro, MD

8:30 am-8:50 am

Aortic Regurgitation: Moderate or Severe, How Can I Be Sure?

A. Jamil Tajik, MD

8:50 am-9:10 am

Follow-up and Management of Aortic Regurgitation: When is it Time to Operate?

Richard L. Popp, MD, FASE

9:10 am-9:30 am

Aortic Valve Replacement: How Does the Surgeon Choose the Operation?

Patrick M. McCarthy, MD

Educational Objective: Upon completion of this session, participants will appreciate a contemporary clinical approach to aortic stenosis and regurgitation and the role echo-Doppler plays in each.

7:30 am-9:30 am

Room 30 (C-E)

S 6 & 7 – Sonographer Track

Illustrative Cases in Valve Disease: Physician-Sonographer Team Approach (Part 1)

Chairs: James D. Thomas, MD
Fletcher A. Miller, Jr., MD, FASE

7:30 am-8:00 am

Assessing Prosthetic Valves

Fletcher A. Miller, Jr., MD, FASE
Leslie A. Elvert, BS, RDCS

8:00 am-8:30 am

Diagnosing and Quantifying Aortic Stenosis

Mani A. Vannan, MBBS
Margaret L. Knoll, RDCS, FASE

Illustrative Cases in Valve Disease: Physician-Sonographer Team Approach (Part 2)

8:30 am-9:00 am

Diagnosing and Quantifying Mitral Stenosis

James D. Thomas, MD
David A. Homa, RDCS

9:00 am-9:30 am

Valve Disease in Pediatric Patients

Thomas R. Kimball, MD, FASE
Frederick D. Jones, RDCS

Educational Objective: To review the two-dimensional echocardiographic and Doppler hemodynamic assessment of valvular heart disease.

8:30 am-9:30 am

Room 20 D

A7 – Cases

Case-Based Teaching: Evaluation of Prosthetic Valves

Chairs: Marielle Scherrer-Crosbie, MD, PhD
David S. Rubenson, MD

8:30 am-8:45 am

A Systematic Approach to Follow Prosthetic Valves: How Do You Define Dysfunction?

Linda D. Gillam, MD, FASE

8:45 am-9:00 am

Doppler is Better than the Cath Lab

Joseph F. Malouf, MD

9:00 am-9:15 am

The Thrombosed Prosthetic Valve: I Advocate Thrombolysis

Alfred F. Parisi, MD, FASE

9:15 am -9:30 am

The Thrombosed Prosthetic Valve: I Advocate Surgery

Mario J. Garcia, MD

Educational Objective: Upon completion of this session, participants will have interacted with faculty and appreciate the advanced role of echo-Doppler on clinical decision-making for patients with prosthetic valves through illustrative cases.

8:30 am-9:30 am

Room 33

H7 – Special Sessions

Diseases of the Aorta

*Chairs: Alan S. Pearlman, MD, FASE
Satish Kumar Parashar, MD*

8:30 am-8:45 am

The Spectrum of Diseases of the Aorta

Randolph P. Martin, MD

8:45 am-9:00 am

Following Dilated Ascending Aortas -TEE, CT, MRI: Which Is Better? When to Operate?

Arthur J. Labovitz, MD, FASE

9:00 am-9:15 am

TEE for Chest Trauma

Jeanne M. DeCara, MD

9:15 am-9:30 am

Atheromatous Disease of the Aorta: What Do I Do with the Information?

Itzhak Kronzon, MD, FASE

Educational Objective: Upon completion of this session, participants will be familiar with the spectrum of diseases of the aorta, following dilated ascending aortas, TEE for chest trauma, and atheromatous disease of the aorta.

8:30 am-9:30 am

Room 32

X7 – Meet the Experts/How To

How to Set Up a Vascular Lab

*Chairs: Shunichi Homma, MD
Gail P. Size, BS, RVS, RVT*

8:30 am-8:50 am

What Do I Need to Get Started?

Gail P. Size, BS, RVS, RVT

8:50 am-9:10 am

Making the Transition from Echo Lab to Echo-Vascular Lab

Shunichi Homma, MD

9:10 am-9:30 am

Which Vascular Studies to Perform?

Alan G. Fraser, MB, FRCP

Educational Objective: Upon completion of this session, participants will gain practical insight on how to set up a vascular lab, make the transition from echo lab to echo-vascular lab, and decide which vascular studies to perform.

8:30 am-9:30 am

Room 31

D7 – Meet the Experts/How-To

Multimedia Presentations in Echo: The Good, the Bad, and the Ugly

*Chair: Bijoy K. Khandheria, MBBS
Presenters: Joseph Kisslo, MD, FASE
David B. Adams, RDCS, FASE
Bijoy K. Khandheria, MBBS*

Educational Objective: Upon completion of this session, participants will have interacted with the faculty to gain practical insight on how to construct an educational and entertaining presentation.

8:30 am-9:30 am

Room 30 A-B

CC7 – Core Curriculum

Next Door Neighbors: The Pericardium and Great Vessels

*Chairs: Priscilla J. Peters, BA, RDCS, FASE
Anita Kelsey, MD*

8:30-9:00 am

Diseases of the Pericardium

Neil J. Weissman, MD, FASE

9:00 am-9:30 am

The Great Vessels

Merri Bremer, BSN, RN, RDCS, FASE

Educational Objective: Upon completion of this session, participants will appreciate:

1. The echocardiographic appearance of the normal pericardium and great vessels.
2. The echocardiographic features of cardiac tamponade, constrictive pericarditis and abnormalities of the thoracic aorta.

Pediatric Echocardiography Oral Abstracts

7:30 am-9:30 am

Room 29

PE 6 & 7 – Pediatric Track

*Chairs: Gregory J. Ensing, MD, FASE
L. LuAnn Minich, MD*

PE-01 Color Doppler Tissue Imaging for Evaluation of Right Ventricular Systolic Function in Patients With Congenital Heart Disease

Irene D Lytrivi, Wyman W Lai, H. Helen Ko, James C Nielsen, Ira A Parness, Shubhika Srivastava. Mount Sinai Medical Center, New York, NY

Tuesday, June 29

PE-02 Echocardiographic Myocardial Performance Index Correlates Well with Cardiac Magnetic Resonance Derived Ejection Fraction of Systemic Right Ventricle in Patients with Transposition of Great Arteries

Omid Salehian, Markus Schwerzmann, Gary Webb, Judith Therrien. University of Toronto, Toronto, ON, Canada

PE-03 Elastic Properties of the Aorta in Hypoplastic Left Heart Syndrome

Brian M Cardis, Derek A Fyfe, William T Mahle. Emory University School of Medicine, Children's Healthcare of Atlanta, Atlanta, GA

PE-04 Prevalence of Perinatal Atrioventricular Valve Regurgitation in the Single Ventricle: From the Fetus, Through Birth, and Initial Palliative Surgery

Mark D Levin, J. W Gaynor, Zhiyun Tian, Meryl S Cohen, Denise D Donaghue, Thomas L Spray, Bernard J Clark, III, Jack Rychik. Children's Hospital of Philadelphia, Philadelphia, PA

PE-05 Should Patients in the American Society of Anesthesiologists' Classification of Physical Status Class 3 or 4 be Sedated for Echocardiography Without an Anesthesiologist?

Lisa C Heinstein, Claudio Ramaciotti, William A Scott, Melanie Coursey, Matthew S Lemler. University of Texas Southwestern Medical Center/Children's Medical Center of Dallas, Dallas, TX

PE-06 Doppler Assessment of Isolated Pulmonary Valve Stenosis: Outpatient Mean Gradient has the Most Clinical Validity

Suchaya Silvilairat, Allison K Cabalka, Frank Cetta, Donald J Hagler, Patrick W O'Leary. Division of Pediatric Cardiology, Mayo Clinic, Rochester, MN

PE-07 Tissue Doppler Echocardiography Combined with a New 2D Strain Analysis Method Aid Assessment of Ventricular Resynchronization Pacing in Children with Congenital Heart Disease

Phat Pham¹, Seshadri Balaji¹, Aarti Hejmadi Bhat¹, Azaria JJT Rein², James Pemberton¹, Zeev Perles², Muhammad Ashraf¹, Richard Reed¹, David Stuessel¹, Xiaokui Li¹, Peter Lysyansky², Irving Shen¹, Ross M Ungerleider¹, David J Sahn¹. ¹Oregon Health & Science University, Portland, OR; ²Hadassah Medical Center, the Hebrew University, Jerusalem, Israel. ³GE Medical Systems, Tirat Carmel, Israel

PE-08 Affect of Altered Left Ventricular Loading Conditions on Doppler Tissue Imaging Velocities in Congenital Heart Disease

Benjamin W Eidem, Colin J McMahon, John P Kovalchin, Susan W Denfield, Carolyn A Altman, Louis I Bezold, Nancy A Ayres, Ricardo H Pignatelli. Baylor College of Medicine, Houston, TX

Educational Objectives: Upon completion of this session, participants will be able to appreciate the latest in research in pediatric echocardiography.

9:30 am-10:00 am

Break

ATTENDEES ARE INVITED TO VISIT THE EXHIBITS AND REFRESHMENT AREA ON THE EXHIBIT FLOOR

Concurrent Sessions

10:00 am-11:30 am

Room 20 A-C

G8 – Disease Focus

Clinical Aspects of Mitral Regurgitation

*Chairs: Neil J. Weissman, MD, FASE
Judy Hung, MD*

10:00 am-10:20 am

Mitral Regurgitation: Mechanisms and ASE Consensus Report on Assessment

Robert A. Levine, MD

10:20 am-10:35 am

When Do I Operate for Mitral Regurgitation?

A. Jamil Tajik, MD

10:35 am-10:50 am

Is There a Role for Stress Testing?

Ramon Castello, MD

10:50 am -11:05 am

Assessment Before and After Mitral Repair: Partnering with the Surgeon

William J. Stewart, MD, FASE

11:05 am-11:25 am

Role of Echo/Doppler in Newer Therapies for Mitral Regurgitation

Natesa G. Pandian, MD

Educational Objective: Upon completion of this session, participants will appreciate a contemporary clinical approach to mitral valve disease and the important role that echo-Doppler plays.

10:00 am-11:30 am

Room 20 D

A8 – Cases

Intracardiac Masses: You Have To See These!

*Chair: Bijoy K. Khandheria, MBBS
Case Presenters:
Samuel Chi Bun Siu, MD, FASE
Ingela Schnittger, MD
Sunil Mankad, MD, FCCP
Victor G. Davila-Roman, MD
Bijoy K. Khandheria, MBBS*

Educational Objective: In this session participants will interact with faculty on interesting and diagnostically challenging cases of intracardiac masses.

10:00 am–11:30 am

Room 33

H8 – Special Sessions

ASE / European Association of Echocardiography Special Joint Symposium: Focus on Strain Imaging

*Chairs: Fausto J. Pinto, MD, PhD
Michael H. Picard, MD*

10:00 am–10:20 am **Strain Imaging 2004: Too Complex or Too Simple?**
James D. Thomas, MD

10:20 am–10:40 am **Post-Systolic Thickening: What Does it Mean Clinically?**
Otto A. Smiseth, MD

10:40 am–11:00 am **Translating Experimental Findings into Clinical Practice**
Theodore P. Abraham, MD, FASE

11:00 am–11:20 am **Applications for Stress Echo: Tissue Doppler or Strain?**
Alan G. Fraser, MB, FRCP

11:20 am–11:30 am **Panel Discussion**
Educational Objective: Upon completion of this session, participants will appreciate technological advances in strain and strain rate imaging, including applications to coronary disease and stress echo, experimental findings, and a view into the future.

10:00 am–11:30 am

Room 32

X8 – Meet the Experts/How To

Evolving Applications of Three-Dimensional Echocardiography

*Chairs: Masood Ahmad, MD, FASE
Aasha S. Gopal, MD, FASE*

10:00 am–10:20 am **3D Echo Imaging Planes and Anatomical Correlations**
Natesa G. Pandian, MD

10:20 am–10:35 am **3D Color Flow and Valve Disease**
Marti L. McCulloch, BS, RDGS, FASE

10:35 am–10:50 am **Assessment of Ventricular Function with 3D**
Roberto M. Lang, MD, FASE

10:50 am–11:10 am **My Best 3D Cases: Clinical Implications**
Navin C. Nanda, MD

11:10 am–11:30 am **From Gated Acquisition to Real-Time 3D: Future Directions**
Joseph Kisslo, MD, FASE
Educational Objective: Upon completion of this session, participants will appreciate technological advances in 3D echo, including imaging planes and anatomical correlations, 3D color flow and valve disease, and clinical implications.

10:00 am–11:30 am

Room 31

D8 – Special Session

Pulmonary Hypertension: Echo Plays an Essential Role

*Chairs: James L. Weiss, MD
Daniel G. Blanchard, MD*

10:00 am–10:20 am **The Spectrum of Pulmonary Hypertension: Clinician's Perspective and Update on Management**
Srinivas Murali, MD

10:20 am–10:40 am **Echo Assessment of the Right Ventricle and Acute Pressure Overload**
Gerald I. Cohen, MD, FASE

10:40 am–11:00 am **Chronic Pulmonary Emboli: Role of Echo in PreOp and IntraOp Care**
Ajit Raisinghani, MD

11:00 am–11:20 am **Role of Echo in Primary Pulmonary Hypertension**
Lawrence G. Rudski, MD

11:20 am–11:30 am **Discussion**
Educational Objective: Upon completion of this session, participants will be familiar with the essential role that echo plays in pulmonary hypertension including assessment of the right ventricle and acute pressure overload, chronic pulmonary emboli and primary pulmonary hypertension.

10:00 am–11:30 am

Room 30 C-E

S8 – Sonographer Track

Creating the Modern Echo Lab: Equipment, Personnel and Throughput

*Chairs: Oi Ling B. Kwan, RDGS, FASE
Ann L. Dempsey, RDGS, RDMS, RVT*

10:00 am–10:30 am **“The Art of the Deal” How to Control the Ultrasound Demo and Purchase the Right Equipment for Today's Busy Lab**
Margaret L. Knoll, RDGS, FASE

10:30 am–11:00 am **“Sonographer Recruitment and Retention” Tips for Hiring in a Competitive Market and Methods to Increase Employee Satisfaction**
Helga Lombardo, RDGS

11:00 am–11:30 am **Improving Throughput: Developing Practice Strategies to Get the Most from your Protocols, Digital Network, and your Boss!**
Donna Ehler, BS, RDGS, FASE
Educational Objective: To review the dynamics involved in creating and maintaining a modern echo lab.

Tuesday, June 29

10:00 am–11:30 am

Room 30 A-B

CC8 – Core Curriculum

Keeping Blood Moving: The Cardiac Valves

Chair: Jane E. Marshall, BS, RDCS, FASE

10:00 am–11:30 am

Too Leaky, Too Narrow, Just Right

Linda D. Gillam, MD, FASE

Educational Objective: Upon completion of this session, participants will understand the anatomy, physiology and echocardiographic features of normal and abnormal cardiac valves.

10:00 am–11:30 am

Room 29

PE8 – Pediatric Track

Challenges in Complex Single Ventricles: Imaging to Palliative Strategies

Chairs: Frank C. Smith, MD, FASE
Lloyd Y. Tani, MD

10:00 am–10:20 am

Ventricular Hypoplasia: One, One and a Half, or Two Ventricles?

Meryl S. Cohen, MD

10:20 am–10:40 am

Systemic Venous Anomalies: Is it Time for the Hemi-, Semi-, or Complete Fontan?

Leo Lopez, MD

10:40 am–11:00 am

Pulmonary Arterial and Venous Anomalies: Is Everyone a Fontan Candidate?

Girish S. Shirali, MBBS

11:00 am–11:20 am

Late Sequelae after Fontan: Why is My Fontan Broken?

Patrick W. O'Leary, MD

11:20 am–11:30 am

Discussion

Educational Objectives: Upon completion of this session, participants will be able to:

1. understand echocardiographic techniques that help in prediction of adequacy of ventricular size when ventricular size is a concern;
2. appreciate echocardiographic techniques in the assessment of systemic venous anomalies associated with the various forms of single ventricle anatomy and their impact on palliative strategies;
3. appreciate echocardiographic techniques in the assessment of pulmonary arterial and venous anomalies associated with the various forms of single ventricle anatomy and their impact on palliative strategies;
4. understand the utility of echocardiography in assessing anatomic and physiologic parameters after Fontan palliation that impact patient outcome.

Abstract Poster Session 3

Exhibit Halls D, E

Presented: 10:00 am–1:00 pm

Moderated: 10:00 am–11:30 am

Moderators: 1. Sherif F. Nagueh, MD
2. Chuwa Tei, MD

Systolic and Diastolic Function

Moderated Posters P3-01–P3-14

P3-01 Measurement of the Change in Ventricular Torsion Before and After Biventricular Pacer Implantation

Yuichi Notomi, Richard A Grimm, Takahiro Shiota, Deborah A Agler, Neil L Greenberg, James D Thomas. Cleveland Clinic Foundation, Cleveland, OH

P3-02 The Diagnostic Accuracy of an Echocardiographic Estimate of Pulmonary Vascular Resistance in Pre-Liver Transplant Patients

Barry H McKeown¹, Dan Dang², John Roberts¹, Nelson B Schiller¹, Elyse Foster¹. ¹University of California, San Francisco, San Francisco, CA; ²St Mary's Hospital, San Francisco, CA

P3-03 Index of Myocardial Performance is Afterload Dependent in the Normal and Abnormal Left Ventricle

Steven J Lavine. University of Florida/Jacksonville, Jacksonville, FL

P3-04 Strain and Strain Rate Show Subclinical Ventricular Dysfunction in Patients With and Without Contractile Reserve in Asymptomatic Severe Mitral Regurgitation

Raymond Lee, Lizelle Hanekom, Sudhir Wahi, Rodel Leano, Thomas H Marwick. University of Queensland, Brisbane, Australia

P3-05 Noninvasive Quantification of Regional Ventricular Function by Ultrasound Strain Rate and Strain in Rats

Takashiro Hirano, Toshihiko Asanuma, Kohei Okuda, Ryoko Azakami, Fuminobu Ishikura, Shintaro Beppu. School of Allied Health Sciences, Faculty of Medicine, Osaka University, Suita, Japan

P3-06 Interaction of Age and Exercise on Left Ventricular Remodeling in Mice

John G Morgan¹, Jose M Cuesta¹, Fumito Ichinose¹, Tereza Coman¹, Ryuji Hataishi¹, Candace Lee¹, Kenneth D Bloch¹, Michael H Picard¹, Genevieve Derumeaux², Marielle Scherrer-Crosbie¹. ¹Massachusetts General Hospital, Boston, MA; ²INSERM E 9920, Rouen University, Rouen, France

P3-07 Electrical Versus Mechanical Dyssynchrony in Patients Receiving Cardiac Resynchronization Therapy

Brett C Burgess, Peng Li, Aman Chugh, William F Armstrong. University of Michigan, Ann Arbor, MI

P3-08 Impact of Pulmonary Thromboendarterectomy on Right-sided Echocardiographic Parameters in Patients with Chronic Thromboembolic Pulmonary Hypertension

Grace Casaclang-Verzosa, Jae K Oh, Fletcher A Miller, Jr., Robert B McCully, Christopher G McGregor. Mayo Clinic, Rochester, MN

P3-09 Cost-Effectiveness of Echocardiography and B-type Natriuretic Peptide in the Prognosis of Patients with Congestive Heart Failure

Hisham Dokainish, William A Zoghbi, Eunice Ambriz, Miguel A Quinones, Sherif F Nagueh. Baylor College of Medicine, Houston, TX

- P3-10 Influence of Mitral Regurgitation on Newer Echocardiographic Indices of Diastolic Function in Systolic Heart Failure: An ADEPT sub-study**
Richard W Troughton¹, Patrick Nash², Maureen Martin², Annitta J. Morehead², Jeremy J Pereira², Randall C Starling², Allan L Klein². ¹Christchurch School of Medicine, Christchurch, New Zealand; ²Cleveland Clinic Foundation, Cleveland, OH; ³Hospital, Melbourne, Australia
- P3-11 Left Ventricular Diastolic Function in Patients with Hypertension: Comparison of Tissue Doppler Imaging and Color M Mode Flow Propagation Velocities**
Lisa de las Fuentes, Alan D Waggoner, Nada Memon, Joann L Reagan, Sheng-Jing Dong, Victor G Davila-Roman. Washington University, Saint Louis, MO
- P3-12 Longitudinal diastolic deformation provides information on myocardial stiffness: Implications for detection of myocardial viability**
Cristina Pislaru, Jill L Allen, Patricia A Pellikka, James B Seward, Erik L Ritman, James F Greenleaf. Mayo Clinic College of Medicine, Rochester, MN
- P3-13 Left Ventricular Relaxation is Improved by Exercise-training in Elderly Patients with Preserved Left Ventricular Systolic Function**
John A Sallach¹, Benjamin D Levine², Tony G Babb², Clyde W Yancy², Anand Prasad², Neil Greenberg¹, Allen Borowski¹, Zoran Popovich¹, Mario J Garcia¹, James D Thomas¹. ¹Cleveland Clinic Foundation, Cleveland, OH; ²University of Texas Southwestern, Dallas, TX
- P3-14 Association of Atheroma as Assessed by Intra-operative Transesophageal Echocardiography with Long-Term Mortality in Patients Undergoing Cardiac Surgery**
Tushar K Shah, Senthil K Thambidorai, Allan L Klein, William J Stewart, Michael S Lauer. Cleveland Clinic Foundation, Cleveland, OH

Ventricular & Atrial Function (II)

Posters P3-15–P3-28

- P3-15 Comparison of Left Ventricular Volumes and Ejection Fraction Derived from Acquisitions Using Biplane Imaging and Routine 2D-Echocardiography**
Alexi Zemsky, Georgeanne Lammertin, Deborah Roesch, Ravi Garg, Javed Ali, Roberto M Lang, Lissa Sugeng. University of Chicago, Chicago, IL
- P3-16 Mitral Annular Calcification is Associated With Prevalent but not With Incident Atrial Fibrillation in the Elderly. The Cardiovascular Health Study**
Eddy Barasch, Emily K. Marino Larsen, Paulo Chaves, John S. Gottdiener. St. Francis Hospital/Stony Brook University, Roslyn, NY
- P3-17 Tissue Doppler Echocardiography and Optimization of Mechanical Resynchronization with Biventricular Pacing**
Brett C Burgess, Peng Li, Aman Chugh, William F Armstrong. University of Michigan, Ann Arbor, MI
- P3-18 Left Anterior Hemiblock is Associated with Intraventricular Dyssynchrony in the Presence of a Normal QRS Duration**
Adam E Berman, Sammy Khatib, Timothy Donahue, Christian S Breburda. Ochsner Clinic, New Orleans, LA
- P3-19 Single-beat Determination of Left Ventricular Systolic Function in Patients with Atrial Fibrillation Using Matrix-array Technology**
Chun-Li Wang, Chi-Tai Kuo, Pao-Hsien Chu, Wan-Jing Ho, Lung-An Hsu. Chang Gung Memorial Hospital, Taipei, Taiwan Republic of China
- P3-20 Longitudinal Systolic Function by Tissue Doppler Imaging and Long-axis M-mode Echocardiography Can Predict Left Ventricular Ejection Fraction Even in Patients with Poor Image Quality**
Satoshi Yuda, Noriyuki Fujii, Yoshie Inaba, Naoko Kobayashi, Akiyoshi Hashimoto, Kikuya Uno, Tomoaki Nakata, Kazufumi Tsuchihashi, Kazuaki Shimamoto. 2nd Department of Internal Medicine, Sapporo Medical University School of Medicine, Sapporo, Hokkaido, Japan

- P3-21 Mechanism of Benefit of Right Ventricular Pre-excitation in Critical Pulmonary Stenosis**
T. Alexander Quinn, David G Rabkin, Santos E Cabreriza, Lauren J Curtis, Henry M Spotnitz. Columbia University, New York, NY
- P3-22 Left Atrial Size is Age and Gender Dependent**
Eddy Barasch, Catalin Loghin, Fernando Boccalandro, Carol Butler, Roger Grimson, Mihai Croitoru. St. Francis Hospital/Stony Brook University, Roslyn, NY
- P3-23 Right Ventricle Outflow Tract Fractional Shortening and Myocardial Performance Index in Patients with Pulmonary Embolism**
Jesper Kjaergaard¹, Bente K Schaad², Christian Hassager¹. ¹Dept. of Cardiology, University Hospital of Gentofte, Hellerup, Denmark; ²Dept. of Clinical Physiology, University Hospital of Gentofte, Hellerup, Denmark
- P3-24 Nitric Oxide Synthase 3 and Exercise Induced Ventricular Remodeling in Mice**
Jose M Cuesta¹, John G Morgan¹, Fumito Ichinose¹, Ryuji Hataishi¹, Kenneth D Bloch¹, Genevieve Derumeaux², Michael H Picard¹, Marielle Scherrer-Crosbie¹. ¹Massachusetts General Hospital, Boston, MA; ²INSERM E 9920, Rouen University, Rouen, France
- P3-25 The Role of Repeating Atrioventricular Interval Optimization during Long-term Follow up after Cardiac Resynchronization Therapy for Heart Failure: Comparison of Echocardiography and Bioimpedance Methods**
Cheuk-Man Yu¹, Jeffrey Wing-Hon Fung¹, Qing Zhang¹, Shun-Ling Kong¹, Chi-Kin Chan², Hong Lin¹, Yat-Sun Chan¹, Gabriel Wai-Kwok Yip¹, John E Sanderson¹. ¹The Chinese University of Hong Kong, Hong Kong, Hong Kong Special Administrative Region of China; ²Alice Ho Miu Ling Nethersole Hospital, Hong Kong, Hong Kong Special Administrative Region of China
- P3-26 Correlation of Right Ventricular Systolic Function with Tricuspid Annulus Tissue Doppler Imaging in Patients with Left Ventricular Dysfunction: An ADEPT Trial Ancillary Study**
John A Sallach¹, Richard W Troughton², Annette Fogarty¹, Maureen Martin¹, Allan L Klein¹. ¹Cleveland Clinic Foundation, Cleveland, OH; ²University of Christchurch, Christchurch, New Zealand
- P3-27 Tissue Doppler Technique for Evaluating Left Ventricular Myocardial Displacement in Normals and Dilated Cardiomyopathy**
Jing Ping Sun, Hua Yang, Neil L Greenberg, Mario J Garcia, William J Stewart, Allan L Klein, James D Thomas. The Cleveland Clinic Foundation, Cleveland, OH
- P3-28 Cardiac Wall Motion Dyssynchrony Analysis In Apical Four-Chamber View With Echo Phase Imaging**
Lei Su¹, Pat Von Behren¹, Susheel K Koda², Nelson Schiller², Timothy Thigpen¹. ¹Siemens Medical Solutions, Issaquah, WA; ²University of California, San Francisco, San Francisco, CA

3D Echocardiography: Techniques & Applications (II)

Posters P3-29–P3-39

- P3-29 Use of Realtime 3D Echo to Measure Left Atrial Volume: Comparison with Other Echo Techniques**
Carly Jenkins, Kristen Bricknell, Rodel Leano, Thomas H Marwick. University of Queensland, Brisbane, Australia
- P3-30 Free-hand 3D Echo: A Better Approach to Clinical Decision-Making in Patients with Reduced Left Ventricular Systolic Function**
Rupa R Krishnaswamy, Aasha S Gopal, Rena S Toole, William Schapiro, Nathaniel Reichel. St. Francis Hospital, Roslyn, NY
- P3-31 Contrast-Enhanced Matrix Array Imaging Of Small Vessels With Pulse Inversion**
Johnny Kuo, Olaf T von Ramm. Duke University, Durham, NC

P3-32 Comparison of Real Time Live Three-dimensional Echocardiography with Two-dimensional Echocardiography and Magnetic Resonance Imaging in Patients with Hypertrophic Cardiomyopathy. Preliminary Results

Jeanne M Tsutsui, Leticia S Bicudo, Charles Mady, Julie Brie, Edmundo Arteaga, Jose L Andrade, Clarissa Sarmento, Carlos E Rochitte, Jose F Ramires, Wilson Mathias, Jr. Heart Institute (InCor)-University of Sao Paulo Medical School, Sao Paulo, Brazil

P3-33 Real Time 3D Echocardiography-A New Non-Invasive Method for Reliable Measurement of Cardiac Output

Sean M Fleming, Christoph Kieseewetter, Barry Cumberledge, Gareth Parry, Antoinette Kenny. Freeman Hospital, Newcastle Upon Tyne, United Kingdom

P3-34 Three Dimensional (3D) Cardiac Imaging by Novice Sonographers Accuracy of Real-Time 3D Cardiac Imaging

Allen G Borowski, Kathleen C Kassimatis, Jeanne K Drinko, Stephanie Oryszak, Joon Han Shin, Richard Troughton, Neil L Greenberg, James D Thomas. The Cleveland Clinic Foundation, Cleveland, OH

P3-35 Inclusion of the Outflow Tract in Tomographic Determination of Left Ventricular Volumes: An Explanation for Differences Between Freehand Three-Dimensional Echocardiography and Magnetic Resonance Imaging?

Lyna El-Khoury Rumbarger, Donald L King, Michel G Khouri, Mathew S Maurer. Columbia University, New York, NY

P3-36 Atrial Septal Aneurysm in the Fetus. Incidence, Prenatal Findings and Postnatal Significance

Ruben J Acherman, William N Evans, Gary A Mayman, Kathleen A Cass, Katrinka T Kip, Abraham Rothman, Carlos F Luna, Humberto Restrepo. Children's Heart Center, Las Vegas, NV

P3-37 Live Three Dimensional Echocardiography in the evaluation of left ventricular function in top level athletes: a comparison with MRI

Stefano De Castro¹, Stefano Caselli¹, Antonio Pelliccia¹, Iacopo Carbone¹, Elena Cavarretta¹, Andrea Marcanonio¹, Emanuele Diangelantonio¹, Daniela Righi¹, Natesa Pandian², Francesco Fedele¹. ¹La Sapienza, University of Rome, Rome, Italy; ²TUFTS University, Boston, MA

P3-38 Validation of Live Three-Dimensional Echocardiography for Quantification of Absolute Left Ventricular Volumes; Comparison with Volumetric Three-Dimensional Echocardiography

Joon-Han Shin, Takahiro Shiota, Jian Xin Qin, Deborah A Agler, Giuseppe Saracino, Neil Greenberg, Stephanie Oryszak, Patrick J Nash, Yoko Eto, James D Thomas. The Cleveland Clinic, Cleveland, OH

P3-39 Live Real-time Three-Dimensional Echocardiography as the Routine Mode of Echocardiographic Imaging in Daily Clinical Practice: Experience in 700 Patients

Natesa G Pandian¹, Stefano DeCastro², Navin Nanda³, Federica Papetti⁴, Stefano Caselli¹, Kyung-Soon Hong¹, Heidi Brennecke¹, Raeda Gheewala¹, Jessica Blander¹, Anirban Banerjee¹, Hans Joachim Nesser⁴, Prem Soman¹, Alberto Milan¹. ¹Tufts-New England Medical Center, Boston, MA; ²La Sapienza University, Boston, Italy; ³UAB, Birmingham, AL; ⁴St. Elizabethinen Hospital, Linz, Austria

New Technology: Development & Applications (I)

Posters P3-40-P3-49

P3-40 Strain Analysis Using a Novel Two-Dimensional "Acoustic Pattern Tracking" Technique Demonstrates High Intra and Inter-observer, and Inter-institutional Reproducibility in the Clinical Setting

Sanderson Cauduro¹, Karen Modesto¹, Angela Dispenzieri¹, Bijoy Khandheria¹, Marek Belohlavek¹, Peter Lysyansky², Zvi Friedman², Morie Gertz², Theodore Abraham¹. ¹Mayo Clinic, Rochester, MN; ²GE Ultrasound, Haifa, Israel

P3-41 Three-dimensional Automated Analyses of Mitral Annular Dynamics Using Automated Mitral Annular Tracking Method in Patients with Myocardial Infarction

Yasuhiro Takemoto, Takeshi Hozumi, Kenichi Sugioka, Hiroyuki Watanabe, Takashi Muro, Minoru Yoshiyama, Kazuhide Takeuchi, Junichi Yoshikawa. Osaka City University Medical School, Osaka, Japan

P3-42 Diagnostic Accuracy and Prognostic Value of Dobutamine Stress Myocardial Contrast Echocardiography in Patients with Chest Pain and Normal or Isolated Elevation of Cardiac Troponin I

Jeanne M Tsutsui, Feng Xie, James R Anderson, Abdou Elhendy, Edward L O'Leary, Anna C McGrain, Thomas R Porter. University of Nebraska Medical Center, Omaha, NE

P3-43 Noninvasive Diagnosis of Acute Cardiac Allograft Rejection in Children with Tissue Doppler Strain Imaging

Linda B Pauliks¹, Biagio Pietra², Mark Boucek², Scott K Kirby², Lillian M Valdes-Cruz². ¹Tufts-New England Medical Center, Boston, MA; ²University of Colorado Health Sciences Center, Denver, CO

P3-44 Novel Left Ventricular Filling Pressure Index Predicts Exercise Performance in Systolic Heart Failure

Sejan B Patel, Richard W Troughton, Claire Pothier, Patrick Nash, Allan L Klein. The Cleveland Clinic Foundation, Cleveland, OH

P3-45 Cardiac Septum Ablation through the Right Ventricle Using Pulsed High-Intensity Focused Ultrasound

Kana Fujikura¹, Ryo Otsuka¹, Robert Muratore², Jie Wang¹, Kumiko Hirata¹, Frederic L Lizz², Shunichi Homma¹. ¹Columbia Presbyterian Medical Center, New York, NY; ²Riverside Research Institute, New York, NY

P3-46 In Vitro Validation of Cavity Volumes and Mass Determination by Spatio-Temporal Image Correlation (STIC) 4D Imaging Methods for Fetal Echocardiography

Aarti Hejmadi Bhat, Virginia N Corbett, Ruolan Liu, Nathan D Carpenter, Nick W Liu, Anna M Wu, Graham D Hopkins, Xiaokui Li, David J Sahn. Oregon Health & Science University, Portland, OR

P3-47 Left Ventricular Systolic Dyssynchrony in Patients With Dilated cardiomyopathy and Normal QRS duration: Assessment With Tissue Synchronization Imaging

Takuya Hasegawa, Satoshi Nakatani, Takeshi Maruo, Hideaki Kanzaki, Masakazu Yamagishi, Masafumi Kitakaze, Kunio Miyatake. National Cardiovascular Center, Suita, Osaka, Japan

P3-48 Comprehensive Transthoracic Cardiac Imaging in Wild-Type and Genetically Altered Mice Using 30 MHz Ultrasound With Anatomical Confirmation by Magnetic Resonance Imaging

Yu-Qing Zhou, Brian J Nieman, Lorinda Davidson, X. Josette Chen, R. Mark Henkelman, F. Stuart Foster. The Hospital for Sick Children, Mouse Imaging Centre, Toronto, ON, Canada

P3-49 Is Gender an Independent Determinant of Total Arterial Compliance?

Brian A Haluska¹, Leanne Jeffriess¹, Robert Fathi¹, Neil Smart¹, Stephane G Carlier², Thomas H Marwick¹. ¹University of Queensland, Brisbane, Qld, Australia; ²Cardiovascular Research Foundation, Brisbane, Qld, NY

Educational Objective: To obtain insights into the latest in cardiovascular research and applications of echocardiography.

Special Luncheon Symposia

12:00 pm-1:30 pm

Room 28

Special Symposium

The Expanding Role of Echocardiography in Contemporary Therapies for Heart Failure

(Supported by an educational grant from Guidant Corporation)

Chair: Jae K. Oh, MD

12:00 pm -12:20 pm

Evolving Approaches to Treat the Failing Ventricle: How can Echo Help?

Jae K. Oh, MD

12:20 pm-12:40 pm

Role of Echo in Defining Dyssynchrony

Cheuk-Man Yu, PhD

12:40 pm-1:00 pm

Patient Selection and Procedural Aspects of CRT

James M. Mangrum, MD

1:00 pm-1:20 pm

Future Directions of Echocardiography for CRT

Peter Sogaard, MD

1:20 pm-1:30 pm

Discussion

Educational Objective: Upon completion of this session, participants will appreciate the expanding role of echocardiography in contemporary therapies for heart failure including echo in defining dyssynchrony, patient selection and procedural aspects of CRT, and future directions of echocardiography for CRT.

12:00 pm-1:30 pm

Room 30 (C-E)

Special Symposium

Echocardiographic Advances in Quantification of Cardiac Function

(Supported by an educational grant from Toshiba America Medical Systems)

Chair: James D. Thomas, MD

12:00 pm-12:20 pm

Importance of Quantification in Echocardiography Today

James D. Thomas, MD

12:20 pm-12:40 pm

Automated Contour Tracking

Neil Greenberg, PhD

12:40 pm-1:00 pm

Novel Assessment of Regional Ventricular Function: Displacement and Strain

John Gorcsan, III, MD, FASE

1:00 pm-1:20 pm

New Approaches to Quantify Myocardial Perfusion

Shintaro Beppu, MD

1:20 pm-1:30 pm

Questions and Answers

Educational Objective: Upon completion of this session, participants will be familiar with echocardiographic advances in quantification of cardiac function, including automated contour tracking, novel assessment of regional ventricular function, displacement and strain, and new approaches to quantify myocardial perfusion.

12:00 pm-1:30 pm

Room 33

Special Symposium

Contrast Echo in Clinical Practice

(Supported by an educational grant from Bracco Diagnostics, Inc.)

Chair: William A. Zoghbi, MD, FASE

12:00 pm-12:20 pm

What is New in Contrast Agents: What Do You Need to Get Started?

Natesa G. Pandian, MD

12:20 pm-12:40 pm

Use of Contrast in Stress Testing: Who Benefits? How About Perfusion?

Harald Becher, MD, PhD

12:40 pm-1:00 pm

Use of Contrast in Ischemia Syndromes and Viability

Michael Main, MD

1:00 pm-1:20 pm

Expanding Role of Contrast in Clinical Practice: Impact and Cost-Effectiveness

William A. Zoghbi, MD, FASE

1:20 pm-1:30 pm

Panel Discussion

Educational Objective: Upon completion of this session, participants will be more familiar with contrast echo in clinical practice, including use of newer contrast agents, use of contrast in stress testing, use of contrast in ischemia syndromes and viability, expanding role of contrast in clinical practice and its impact on cost-effectiveness.

12:00 pm-1:30 pm

Room 32

Special Symposium

3D Made Easy: Extracting What You Want From 3D Data Sets

(Supported by an educational grant from SIEMENS Medical Solutions)

Chair: Harry Rakowski, MD, FASE

12:00 pm-12:15 pm

Why 3D Imaging Today? A Clinical Perspective

Harry Rakowski, MD, FASE

12:15 pm-12:35 pm

3D Imaging: Anatomical Planes and Basic Approach

Aasha S. Gopal, MD, FASE

Tuesday, June 29

12:35–12:50 pm **Advantages of 3D Quantification of the Left Ventricle**

Mani A. Vannan, MBBS

12:50 pm–1:05 pm **How to Make Sense of a 3D Data Set**

Bernard Mumm, MD

1:05 pm–1:30 pm **Clinical Scenarios Where 3D Makes a Contribution**

Navin C. Nanda, MD

Educational Objective: Upon completion of this session, participants will be more familiar with how to interpret 3D data sets, including anatomical planes and basic approach, advantages of 3D quantification of the left ventricle, how to make sense of a 3D data set, and clinical scenarios where 3D makes a difference.

12:00 pm–1:30 pm

Room 31

Special Symposium

Contrast Echo: Current and Future Clinical Applications

(Supported by an educational grant from Bristol-Myers Squibb Medical Imaging, Inc.)

Chair: Thomas R. Porter, MD

12:00 pm–12:20 pm **Improving Left Ventricular Opacification: Clinical Utility**

Sharon L. Mulvagh, MD

12:20 pm–12:40 pm **Detection of Myocardial Perfusion**

Thomas R. Porter, MD

12:40 pm–12:55 pm **Imaging Vascular Endothelial Function**

Jonathan R. Lindner, MD, FASE

12:55 pm–1:10 pm **Targeted Drug Delivery with Microbubbles**

John M. Erikson, MD, PhD

1:10 pm–1:30 pm **Ultrasound and Microbubbles in Thrombolysis**

Evan C. Unger, MD

Educational Objective: Upon completion of this session, participants will be more familiar with current and future clinical applications of contrast echo, including improving left ventricular opacification, detection of myocardial perfusion, imaging vascular endothelial function, targeted drug delivery with microbubbles and ultrasound and microbubbles in thrombolysis.

12:00 pm–1:30 pm

Room 20 (D)

Special Symposium

Transitioning to the Future: Stress Echo and Myocardial Perfusion

(Supported by an educational grant from Amersham Health)
Chair: Sanjiv Kaul, MD, FASE

12:00 pm–12:20 pm

Quantification of Myocardial Perfusion

Kevin Wei, MD

12:20 pm–12:40 pm

Can Myocardial Contrast Predict Stenosis Severity?

Roxy Senior, MD, DM, FRCP, FESC

12:40 pm–1:00 pm

Myocardial Contrast During Stress Echo

Roberto M. Lang, MD, FASE

1:00 pm–1:30 pm

Echo Contrast in Acute Myocardial Infarction

Sanjiv Kaul, MD, FASE

Educational Objective: Upon completion of this session, participants will be more familiar with contrast echo transitioning to the future in stress echo and myocardial perfusion, including quantification of myocardial perfusion, myocardial contrast and stenosis severity, myocardial contrast during stress echo, and echo contrast in acute myocardial infarction.

1:30–2:00 pm

Break

ATTENDEES ARE INVITED TO VISIT THE EXHIBITS AND REFRESHMENT AREA ON THE EXHIBIT FLOOR

Concurrent Sessions

2:00 pm–3:30 pm

Room 31

D 10 & 11 – Ibero-American Symposium

*Chairs: Roberto M. Lang, MD, FASE
Ricardo E. Ronderos, MD*

**Bienvenidos Da Y Objetiv Os Del Simposio;
Welcome and Symposium Objectives**

Nuevas Tecnicas Y Nuevas Tecnologias; New Techniques and Technologies

2:00 pm–2:15 pm

**Necesito Aprender Resonancia Magnetica??
Do I Need to Learn Magnetic Resonance
Imaging?**

Rodolfo Pizarro, MD

2:15 pm–2:30 pm

**Funcion Endotelial: Existe Un Uso Clinico??
Endothelial Function: Is It Worth Clinically?**

Marta Sitges, MD

2:30 pm–2:45 pm

**Eco 3D, Algo Mas Que Imagenes Bonitas??
3D: Is It Just Pretty Pictures?**

TBD

2:45 pm–3:00 pm

**Se Puede Hacer de Forma Sencilla??
Strain, Strain Rate. Can It Be Done Simply?**

Carlos Eduardo Suaide Silva, MD

3:00 pm-3:15 pm **Perfusion Miocárdica: Hemos Llegado Por Fin??
Myocardial Perfusion: Are We There Yet?**
Wilson Mathias, Jr., MD, FASE

3:15 pm-3:30 pm **Eco De Bolsillo. Nos Dan La Misma
Información??
Hand-held Devices: Do They Provide the
Same Information?**
Vera M. Salemi, MD

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

Insuficiencia Cardíaca: Diagnóstico y Tratamiento; Heart Failure: Diagnosis and Treatment

*Chairs: Ramon Castillo, MD
Gina Cuenca Mantilla, MD*

4:00 pm-4:15 pm **Miocardiopatías Dilatadas. Etiología y
Diagnóstico.
Dilated Cardiomyopathies; Etiology and
Diagnosis**
Harry Acquatella, MD

4:15 pm-4:30 pm **Estratificación de Riesgo en Insuficiencia
Cardíaca Mediante Ecocardiografía.
Heart Failure Risk Stratification with
Echocardiography**
Gonzalo de la Morena, MD

4:30 pm-4:45 pm **Terapia de Resincronización Cardíaca.
Cardiac Resynchronization Therapy**
Eduardo Guevara, MD

4:45 pm-5:00 pm **Cirugía Convencional (Reparación Mitral,
ACORN, etc.)
Conventional Surgery, Mitral Repair, ACORN**
Fausto J. Pinto, MD, PhD

5:00 pm-5:15 pm **Seguimiento de Transplantes Cardíacos.
Terminaron las Biopsias??
Heart Transplant Follow-up. Are Biopsies
Obsolete?**
Jose A. Vazquez de Prada, MD

5:15 pm-5:30 pm **Aproximación Ecocardiográfica a la Terapia
Celular para la Regeneración Cardíaca.
Echocardiographic Approach to Cell Therapy
for Cardiac Regeneration**
Joaquin Barba, MD, PhD

Educational Objective: Following the session, the audience will have been able to learn about new echocardiographic techniques and technologies, including endothelial function, use of MR, 3D echocardiography, hand-held devices. Also the echocardiographic evaluation and follow-up of patients with heart failure will be discussed in detail. Newer surgical techniques, transplantation and molecular approaches to heart failure will be reviewed. All conferences will be presented in Spanish or Portuguese.

2:00 pm-3:30 pm

Room 20 D

A10 – Cases

My Best Cases in Valvular Heart Disease

Chair: Vera H. Rigolin, MD, FASE

Case Presenters:

Vincent L. Sorrell, MD, FASE

Judy Hung, MD

Hans Joachim Nesser, MD

Robert A. Levine, MD

Vera H. Rigolin, MD, FASE

Educational Objective: Upon completion of this session, participants will have interacted with faculty and have become more familiar with diagnostically challenging cases in valvular heart disease.

2:00 pm-3:30 pm

Room 33

H10 – Special Sessions

Joint Symposium with NASPE-Heart Rhythm Society of America: Atrial Fibrillation: The New Epidemic

Chairs: Christopher P. Appleton, MD

Brian D. Hoit, MD, FASE

2:00 pm-2:20 pm **Changing Management of Atrial Fibrillation:
The Electrophysiologist Perspective**

James M. Mangrum, MD

2:20 pm-2:35 pm **Echo For A-Fib: When Should We Do TEE-
Guided Cardioversion?**

Allan L. Klein, MD, FASE

2:35 pm-2:50 pm **TEE-Cardioversion: A Novel Approach**

Itzhak Kronzon, MD, FASE

2:50 pm-3:05 pm **Pulmonary Vein Ablation: Clinical Approach
and Role of ICE**

Mark A. Wood, MD

3:05 pm-3:20 pm **Left Atrial Volumes: A New Perspective**

James B. Seward, MD, FASE

3:20 pm-3:30 pm

Panel Discussion

Educational Objective: Upon completion of this session, participants will appreciate the new epidemic of atrial fibrillation, including the electrophysiologist perspective, TEE-guided cardioversion, pulmonary vein ablation, left atrial volumes as a new perspective.

Tuesday, June 29

2:00 pm-3:30 pm

Room 32

X10 – Meet the Experts/How To

Challenges in Valve Disease

*Chairs: Michael H. Picard, MD
Athena Poppas, MD*

2:00 pm-2:15 pm

How To Evaluate Low Gradient Aortic Stenosis
Jae K. Oh, MD

2:15 pm-2:30 pm

How To Follow Asymptomatic, but Significant Aortic Regurgitation
Julius M. Gardin, MD, FASE

2:30 pm-2:45 pm

How To Follow Asymptomatic, but Significant Mitral Regurgitation
Pamela S. Douglas, MD, FASE

2:45 pm-3:00 pm

How to Integrate 3D Data into Clinical Decision-Making for the Mitral Valve
William J. Stewart, MD, FASE

3:00 pm-3:30 pm

How to Evaluate Tricuspid and Pulmonic Valve Disease: When Do You Operate?
Neil J. Weissman, MD, FASE

Educational Objective: Upon completion of this session, participants will appreciate challenges in valve disease, including how to evaluate low gradient aortic stenosis, how to follow asymptomatic but significant mitral regurgitation, how to integrate 3D data into clinical decision-making for the mitral valve, how to evaluate tricuspid and pulmonic valve disease and when to operate.

2:00 pm-3:30 pm

Room 30 C-E

S10 – Sonographer Track

Tricks of the Trade: Tools to Improve Diagnostic Yield

*Chairs: Kathy L. Edelman, BS, RDCS
Sally P. Moos, RDCS, FASE*

2:00 pm-2:30 pm

It's Possible! Coronary Artery Imaging and Cases to Prove Why You Should Learn How
Kaliopé Berdusis, MBA, RDCS, FASE

2:30 pm-3:00 pm

Contrast Echocardiography: Improved Imaging for Better Outcomes
Gabriella Monet Strachan, RDCS, FASE

3:00 pm-3:30 pm

Adding Newer Technologies into Everyday Use: Strain and Tissue Doppler Imaging: When, Why and How?
Dennis G. Atherton, RDCS, RCT, RRT

Educational Objective: To enable the sonographer to utilize some of the newest tools available to improve the diagnostic yield of the echocardiogram by evaluating the coronary arteries. To understand the impact of contrast agents and tissue Doppler techniques to better assess left ventricular function.

2:00 pm-3:30 pm

Room 30 A-B

CC10 – Core Curriculum

Coronary Artery Disease: Ischemia, Infarction and More

*Chairs: Alan D. Waggoner, MHS, RDCS
Frank Flachskampf, MD*

2:00 pm-2:20 pm

Coronary Anatomy
Judy R. Mangion, MD, FASE

2:20 pm-2:40 pm

Regional Wall Motion Assessment
William A. Zoghbi, MD, FASE

2:40 pm-3:10 pm

Stress Echocardiography
Rick Rigling, BS, RDCS, FASE

3:10 pm-3:30 pm

Mechanical Complications of Infarction: When the Heart Breaks
Malissa J. Wood, MD

Educational Objective: Upon completion of this session, participants will understand:

1. Coronary anatomy as well as the pathophysiology and clinical features of acute and chronic ischemia and infarction.
2. The relation between coronary artery perfusion beds and echocardiographic imaging views.
3. The principles and practice of stress echocardiography.
4. Clinical manifestations and echocardiographic features of the various forms of myocardial rupture.

2:00 pm-3:30 pm

Room 29

PE10 – Pediatric Track

Ebstein's Anomaly: From the Fetus to the Adult

*Chairs: Catherine L. Webb, MD
John P. Kovalchin, MD, FASE*

2:00 pm-2:20 pm

The Spectrum of Disease: A Pathologist's Perspective
Paul Weinberg, MD

2:20 pm-2:40 pm

Fetal and Postnatal Imaging
Jack Rychik, MD

2:40 pm-3:00 pm

Echocardiography in Surgical Decision-Making
James Tweddell, MD

3:00 pm-3:20 pm

Post-op Evaluation and Complications

Adel K. Younoszai, MD

3:20 pm-3:30 pm

Questions and Answers

Educational Objective: Upon completion of this session, participants will have a better understanding of Ebstein's anomaly and the role of echocardiography in assessing the anatomic and physiologic subtypes that can be identified in the fetus, child, and adult with this congenital abnormality. In addition, the participant will have a better understanding of the role of echocardiography in surgical decision-making in patients with Ebstein's anomaly and appreciation of echocardiographic techniques to assess the post-operative surgical result and complications associated with surgical palliation.

Abstract Poster Session 4

Exhibit Halls D, E

Presented: 2:00 pm-5:00 pm

Moderated: 2:00 pm-3:30 pm

Moderators: 1. Mani A. Vannan, MBBS
2. Michael Kontos, MD

Contrast Echocardiography and New Technologies

Moderated Posters P4-01-P4-14

P4-01 A Comparison of the Angiogenic Response to Chronic Ischemia to that Induced by Growth Factor Therapy using V3-Targeted Contrast-Enhanced Ultrasound

Howard Leong-Poi¹, Jonathan P Christiansen², Alexander L Klibanov², Jiri Sklenar², Sanjiv Kauf, Jonathan R Lindner². ¹St. Michael's Hospital, Toronto, ON, Canada; ²University of Virginia, Charlottesville, VA

P4-02 Detection of Regional Coronary Artery Endothelial Dysfunction by Imaging Retained Intravenous Microbubbles with Real Time Low Mechanical Index Coronary Artery Imaging

Thomas R Porter¹, Patrick Phillips², James Chomas², Jeane M Tsutsui¹, Patrick L Iversen³, Stanley J Radio¹, John Lof¹, Martin Cano¹, Feng Xie¹. ¹University of Nebraska Medical Center, Omaha, NE; ²Siemens Medical Solutions, Mountain View, CA; ³AVI BioPharma, Inc, Corvallis, OR

P4-03 Guided Visualization of Therapeutic Ultrasound Assisted Thrombolysis of Acute Arterial Thrombus with Simultaneous Imaging Using a High Frequency Non-Linear Pulse Sequence Scheme

Thomas R Porter¹, Jeane M Tsutsui¹, John Lof¹, Patrick Phillips², Evan C Unger², Terry O Matsunaga², James Chomas², Feng Xie¹. ¹University of Nebraska Medical Center, Omaha, NE; ²Siemens Medical Solutions, Mountain View, CA; ³ImaRx Therapeutics, Inc, Tucson, AZ

P4-04 A Novel Stress Protocol Combining Dipyridamole and Exercise Enables Myocardial Contrast Echo to Provide Incremental Benefit to Standard Stress Echo for the Diagnosis of Coronary Artery Disease

Stuart Moir, Brian Haluska, Carly Jenkins, Robert Fathi, Thomas H Marwick. University of Queensland, Brisbane, Australia

P4-05 Myocardial Contrast Echocardiography is a Cost-Effective Strategy for Patients Presenting With Chest Pain to the Emergency Room

Saul Kalvaitis, William Foster, Diana Rinkevich, Khim Leng Tong, Todd Belcik, Sanjiv Kaul, Kevin Wei. University of Virginia, Charlottesville, VA

P4-06 Myocardial Contrast Echocardiography in Detection of Single and Multivessel Coronary Artery Disease during Supine Bicycle Stress and Continuous Infusion of Contrast Agent

Tomasz Miszalski¹, Harald Schmidt², Peter Bernhardt², Heyder Omran², Berndt Luederitz³, Stefanie Kuntz-Hehner². ¹2nd Department of Internal Medicine, University of Cracow, Cracow, Poland; ²Department of Internal Medicine, St.-Marien-Hospital, Bonn, Germany; ³Department of Cardiology, University of Bonn, Bonn, Germany

P4-07 Myocardial Viability Determined by MCE Influences the Response to Cardiac Resynchronization Therapy in Patients with Ischemic Cardiomyopathy

Todd Belcik, James P Hummel, J. Paul Mounsey, John P Dimarco, Sanjiv Kaul, Jonathan R Lindner. University of Virginia, Charlottesville, VA

P4-08 Comparative Diagnostic Accuracy of Real time Myocardial Contrast Perfusion Imaging and Wall Motion Analysis During Dobutamine Stress Echocardiography. Correlation with Coronary Angiography in 170 Patients

Abdoul Elhendy, Edward L O'Leary, Feng Xie, Anna C McGrain, Thomas R Porter. University of Nebraska Medical Center, Omaha, NE

P4-09 2D Strain-A Novel Doppler Independent Ultrasound Method for Quantification of Regional Deformation: Comparison to Sonomicrometry in a Model of Acute Myocardial Ischemia

Josef Korinek, Partho P Sengupta, Jianwen Wang, Eileen McMahon, Theodore Abraham, Marek Belohlavek. Mayo Clinic, Rochester, MN

P4-10 Improved Delineation of Myocardial Twist by a New Two-Dimensional Strain Analysis Method: An in Vitro Study

Muhammad Ashraf¹, Azaria JJT Reir², Peter Lysyansky², Sarah L Nelson¹, Zeev Perles², Amariak J Jensen¹, J. Salvador de la Cruz¹, Xiaokui Li¹, Aarti Hejmadi Bhat¹, David J Sahn¹. ¹Oregon Health & Science University, Portland, OR; ²Hadassah Medical Center, the Hebrew University, Jerusalem, Israel; ³GE Medical Systems, Tirat Carmel, Israel

P4-11 Subendocardial Radial Strain Using Angle-Corrected Imaging is Related to Mechanical Dyssynchrony: Assessment in a Left Bundle Branch Block and Biventricular Pacing Model

Kaoru Dohi, Michael Pinsky, Hideaki Kanzaki, Donald Severyn, John Gorcsan, III. University of Pittsburgh, Pittsburgh, PA

P4-12 Quantitative Assessment of Regional Myocardial Deformation by a Novel Two-Dimensional (Acoustic Pattern Tracking) Strain Echocardiography: Clinical Validation Using Tissue Doppler Measurements

Karen Modesto¹, Sanderson Cauduro¹, Angela Dispenzieri¹, Bijoy Khandheria¹, Marek Belohlavek¹, Peter Lysyansky², Zvi Friedman², Morie Gertz², Theodore Abraham¹. ¹Mayo Clinic, Rochester, MN; ²GE Ultrasound, Haifa, Israel

P4-13 Cardiac Asynchrony Predicts Left Ventricular Remodeling after Acute Myocardial Infarction-An Echocardiography & Cardiac Magnetic Resonance Imaging Study

Yan Zhang, Anna Chan, Cheuk-Man Yu, Gabriel WK Yip, Mei Wang, WH Fung, John E Sanderson. The Chinese University of Hong Kong, Hong Kong SAR, China

P4-14 The Effect of Azithromycin Therapy on the Coronary Microcirculation in Patients with Coronary Artery Disease Assessed by Transthoracic Doppler Echocardiography

Eiichi Hyodo, Takeshi Hozumi, Yasuhiko Takemoto, Kohei Fujimoto, Hiroyuki Watanabe, Takashi Muro, Kaname Akioka, Minoru Yoshiyama, Kazuhide Takeuchi, Junichi Yoshikawa. Osaka City University School of Medicine, Osaka, Japan

Stress Echocardiography

Posters P4-15–P4-26

- P4-15 Prognostic Value of Clinical Assessment and Dobutamine Echocardiography in Preoperative Risk Stratification of Patients with Ischemic Cardiomyopathy Undergoing Noncardiac Surgery**
Sabeena Ramrakhiani, Mark Fisch, Waqas Ghumman, Jo Mahenthiran, Irmina Gradus-Pizlo, Adam Greene, Masoor Kamalesh, Harvey Feigenbaum, Stephen G. Sawada. Indiana University School Medicine, Indianapolis, IN
- P4-16 Impaired Relaxation Pattern is Associated with Decreased Exercise Tolerance in the Elderly**
Patrick J Nash, Cahide Cinar, Mario J Garcia. Cleveland Clinic Foundation, Cleveland, OH
- P4-17 Usefulness of a Novel Ultrasound Transducer for Continuous Monitoring Treadmill Exercise Stress Echocardiography in Detection of Coronary Artery Stenosis**
Kenichi Nakashiki, Akira Kisanuki, Yutaka Otsuji, Keiko Yuge, Shiro Yoshitoku, Eiji Kuwahara, Toshinori Yuasa, Kunisugu Takasaki, Takeshi Uemura, Bo Yu, Yuko Maki, Naoko Mizukami, Shuichi Hamasaki, Shinichi Minagoe, Chuwa Tei. University of Kagoshima, Kagoshima, Japan
- P4-18 Prognostic Value of ST Segment Elevation During Dobutamine Stress Echocardiography**
Ana Lucia Arruda, Rodrigo B M Barretto, Krishnaswamy Chandraserakan, Patricia A Pellikka. Mayo Clinic, Rochester, MN
- P4-19 Novel Risk Stratification and Prognosis Using Stress Echocardiography: Incorporating Wall Motion Score Index and Ejection Fraction Parameters**
Sripal Bangalore, Siu-Sun Yao, Randy Cohen, Muhammad Z Saeed Malik, Takeki Suzuki, Ranju Soni, Faiz Anwar, Asif Malik, Farooq A Chaudhry. St Lukes-Roosevelt Hospital Center, New York, NY
- P4-20 Doppler Pulmonary Vascular Resistance Response During Supine Exercise in Healthy Subjects**
Pamela Y F Hsu, Fiona L Dulbecco, Rita F Redberg, Kirsten E Fleischmann, Nelson B Schiller. University of California, San Francisco, San Francisco, CA
- P4-21 Effect of Pressure Recovery on Peak Gradient in Aortic Stenosis During Exercise**
Ricardo A Migliore, María Adaniya, Miguel Barranco, Guillermo Miramont, Florencio Guerrero, Horacio Tamagusuku, IV, Alfredo Sinisi. Hospital Eva Perón, San Martín, Pcia de Buenos Aires, Argentina
- P4-22 Prognostic Value of Dobutamine Stress Echocardiography in Patients with Normal Left Ventricular Systolic Function**
Abdou Elhendy¹, Arend F L Schinke², Jeroen J Bax², Ron T van Domburg², Don Poldermans². ¹University of Nebraska Medical Center, Omaha, NE; ²Thoraxcenter, Rotterdam, Netherlands
- P4-23 Prolonged Exercise Leading to Exhaustion in the Healthy Adult: Does Cardiac Fatigue Occur?**
Motaz M Alshaher, Rif El-Mallakh, Tariq S Siddiqui, Rita A Longaker, Marcus F Stoddard. University of Louisville, Louisville, KY
- P4-24 Prognostic Value of Normal Stress Echo Across Wide Spectrum of Stress Electrocardiographic Response**
Sripal Bangalore, Siu-Sun Yao, Randy Cohen, Ranju Soni, Farooq A Chaudhry. St Lukes-Roosevelt Hospital Center, New York, NY
- P4-25 Assessment of coronary flow velocity reserve in the left anterior descending coronary artery after oral glucose loading; a possible mechanism of postprandial angina**
Hidetoshi Yoshitani, Takashi Akasaka, Noriko Okahashi, Teruyoshi Kume, Nozomi Wada, Kousuke Kagamihara, Kiyoshi Yoshida. Kawasaki Medical School, Kurashiki, Japan

- P4-26 Decreased Radial Velocity in Uncomplicated Type 2 Diabetes Mellitus During Dobutamine Stress Echocardiography in the Myocardial Doppler in Diabetes (MYDID) Study**

Lars-Ake Brodin¹, Satish C Govind¹, Miguel Quintana¹, Arvind S R², Simin Roumina¹, Samir K Saha¹. ¹Karolinska University Hospital, Stockholm, Sweden; ²BMJ Heart Centre, Bangalore, India

Valvular Heart Disease

Posters P4-27–P4-36

- P4-27 Baseline Severity Predicts Hemodynamic Progression of Aortic Stenosis**
Rhoda Brosnan, Paul Pappas, James Jollis. Duke University Medical Center, Durham, NC
- P4-28 Mitral regurgitation predicts death after myocardial infarction in the community**
Francesca Bursi, Vuyisile T Nkomo, Maurice Enriquez-Sarano, Steven J Jacobsen, Jill M Killian, Susan A Weston, Veronique L Roger. Mayo Clinic, Rochester, MN
- P4-29 Exercise Echo Predicts Development of Late Post-Operative Left Ventricular Dysfunction and Cardiac Morbidity in Asymptomatic Severe Mitral Regurgitation**
Raymond Lee, Dominic Leung, Brian Haluska, Thomas H Marwick. University of Queensland, Brisbane, Australia
- P4-30 Echocardiographic Markers of Valve Stiffness are Modulated by Afterload**
Michael VanAcker, Katherine Rhodes, Sergio Gutierrez, John Belangia, Joel A Strom. University of South Florida, Tampa, FL
- P4-31 Gender Differences in Left Ventricular and Hemodynamic Adaptation To Severe Aortic Stenosis: Results From 949 Patients**
Padmini Varadarajan, Nikhil Kapoor, Ramdas G Pai. Loma Linda University Medical Center, Loma Linda, CA
- P4-32 Side-by-Side Evaluation of Color Doppler Valvular Regurgitation is Superior to Serial Single Study Assessment**
Tushar K Shah, John A Sallach, Brian P Griffin, Richard A Grimm, L L Rodriguez, Annitta J Morehead, Allan L Klein. Cleveland Clinic Foundation, Cleveland, OH
- P4-33 Effects of Blood Viscosity and Heart Rate on Vena Contracta Dimensions Evaluated by Color Doppler Flow Imaging. An in vitro Study on a Pulsatile Flow Model**
André Schmidt, Telemaco Silva, Jr., Antônio Pazin-Filho, Oswaldo C Almeida-Filho, José A Marin-Neto, Benedito C Maciel. School of Medicine of Ribeirão Preto, Ribeirão Preto-SP, Brazil
- P4-34 Quantitative Evaluation of Three Different Prosthetic Rings in Mitral Annuloplasty by Real-time Three-Dimensional Echocardiography**
Xianhong Shu, Cui-zhen Pan, Mi Zhou, Qiang Zhao. Zhongshan Hospital, Fudan University, Shanghai, China
- P4-35 Altered Basal Inferior/Posterior Geometry Directly Contributes to Leaflet Tethering in Functional Ischemic Mitral Regurgitation**
Leng Jiang, YinPing Liew, William Hiser, Paul Adler, John A Rousou. Tufts-Baystate Medical Center, Springfield, MA
- P4-36 Echocardiographic Screening of Apparently Healthy Young Adults: Spectrum of Findings in 12,127 Males and 1,126 Females**
Ants Palm-Leis, Thomas Harrell, Alvin Antonio, William B Krueyer. Aeromedical Consultation Service, Brooks City Base, TX

Diastolic Function (II)

Posters P4-37–P4-50

- P4-37 Left atrial volume Index—A new measure of Left Ventricular Diastolic Function in Patients with Left Ventricular Systolic Dysfunction**
Michael A Vaccariello, Patrick J Nash, Maureen Martin, Richard Troughton, Allan L Klein. Cleveland Clinic Foundation, Cleveland, OH
- P4-38 Impact of Mitral Regurgitation on Diastolic Filling Pattern: An Observation from 170 Patients with Dilated Cardiomyopathy in ACORN Trial**
Chinami Miyazaki, Seung Woo Park, Fletcher A Miller, Jr., Paul Morrisette, Jae K Oh. Mayo Clinic, Rochester, MN
- P4-39 The Mitral Annular L' Wave: Initial Description, Doppler Echocardiographic and Clinical Correlates**
Carolyn S P Lam, Lin Han, Lieng H Ling. National University of Singapore, Singapore, Singapore
- P4-40 A Stepwise Grading of Diastolic Function Using Echocardiographic Parameters: Validation and Utility**
Kofo O Ogunyankin, Londry Colleen, Paul Malik, Gary W Burggraf, Anthony Sanfilippo. Kingston General Hospital, Kingston, ON, Canada
- P4-41 Are Tissue Doppler Indices of Left Ventricular Diastolic Function and Filling Pressure Valid in the Setting of Significant Mitral Regurgitation?**
Salvatore P Costa, Christine Young, Robert Palac. Dartmouth Hitchcock Medical Center, Lebanon, NH
- P4-42 Relation between Diastolic Dysfunction and Fibrosis Peptides in a Hypertensive Population newly diagnosed**
*Diego Martin-Raymondí, Ines Diaz¹, Begoña Lopez², Javier Diez¹, Joaquin Barba¹.
¹Clinica Universitaria Universidad de Navarra, Pamplona, Spain; ²Facultad de Medicina Universidad de Navarra, Pamplona, Spain*
- P4-43 Reproducibility of Tissue Doppler Imaging and Pulsed-Wave Doppler for Assessment of Left Ventricular Diastolic Function**
Shadi A Qasqas, Alan D Waggoner, Lisa de las Fuentes, Sheng-Jing Dong, Victor G Davila-Roman. Washington University School of Medicine, St. Louis, MO
- P4-44 Is the Tei Index Sensitive to Subtle Abnormalities in Systolic and Diastolic Function in Early Hypertensive Heart Disease?**
Craig S Vinch¹, Giridhar Logsetty², Jeffrey C Hill¹, Dennis A Tighe¹, Theo E Meyer¹, Gerard P Aurigemma¹. ¹UMASS Medical School, Worcester, MA; ²Harvard Medical School, Boston, MA
- P4-45 Myocardial Perfusion in the Nonculprit Territory in Acute Myocardial Ischemia Depends on Ischemic Size and Presence of Stenosis: A Real-time Myocardial Contrast Echocardiography Assessment**
Banthit Khankirawatana, Suwane Khankirawatana, John Lof. University of Nebraska Medical Center, Omaha, NE
- P4-46 Technical Aspects of Diastology: Why Mitral Inflow and Tissue Doppler Imaging are the Preferred Parameters**
Renee L Bess, Shahabuddin Khan, Gerald I Cohen, Howard S Rosman, Cheryl K Nordstrom, Julius M Gardin. St. John Hospital & Medical Center, Detroit, MI
- P4-47 Cardiac Resynchronization Therapy Acutely Improves Left Ventricular Diastolic Filling**
Alan D Waggoner, Sanjeev Garhwal, Mitchell N Faddis, Sharon Heuerman, Victor G Davila-Roman. Washington U. SOM, St. Louis, MO
- P4-48 Pulmonary Vein Flow to Determine Left Atrial Pressure: Can MRI Phase-Velocity Mapping Compete with Doppler Echocardiography**
Veronica V Lenge¹, Raja Muthupilla², Mercedes Pereyra¹, Eric Douglas¹, Antonietta Hernandez², Juan Carlos Roza¹, Raymond Stainback¹, Scott D Flamm³. ¹St Luke's Episcopal Hospital-Texas Heart Institute, Houston, TX; ²Radiology, Baylor College of Medicine, Houston, TX, Houston, TX; ³St Luke's Episcopal Hospital-Texas Heart Institute, and Radiology, Baylor College of Medicine, Houston, TX

P4-49 Plasma Triglyceride Level is an Independent Predictor of Left Ventricular Diastolic Function

Lisa de las Fuentes, Laura C Mitchell, Angela A Brown, Linda R Peterson, Attila Kovacs, Alan D Waggoner, Victor G Davila-Roman. Washington University, Saint Louis, MO

P4-50 Changes in Doppler Mitral Inflow Patterns During Parabolic Flight

Enrico G Caiani¹, Giulia Asquer¹, Elisa Meraviglia¹, Sergio Cerutti¹, Maurizio Turie², Olivier Bailliar³, Bernard Chollet⁴, André Capderou⁴, Pierre Vaida⁵. ¹Politecnico di Milano, Milano, Italy; ²Istituto Ortopedico Galeazzi-Università di Milano, Milano, Italy; ³CHU Lariboisière, Paris, France; ⁴Université Paris Sud, Le Plessis Robinson, Paris, France; ⁵Université Victor Segalen Bordeaux 2, Médecine Aéropatiale, Bordeaux, France

Educational Objective: To obtain insights into the latest in cardiovascular research and applications of echocardiography.

Concurrent Sessions

4:00 pm–5:30 pm

Room 20 D

A11 – Cases

My Worse TEE Nightmare

Chair: Natesa G. Pandian, MD

Case Presenters:

Randolph P. Martin, MD

Joseph Kisslo, MD, FASE

Alan S. Pearlman, MD, FASE

Harry Rakowski, MD, FASE

Natesa G. Pandian, MD

Educational Objective: Upon completion of this session, participants will be familiar with interesting and diagnostically challenging TEEs.

4:00 pm–5:30 pm

Room 33

H11 – Special Sessions

Echo in the Stroke Patient

Chairs: Kiran B. Sagar, MD

David I. Silverman, MD

4:00 pm–4:30 pm

TIA and Stroke in 2004: The Neurologist's Perspective

Christy Jackson, MD

4:30 pm–4:50 pm

Contemporary Clinical Use of Echo in TIA or Stroke: When Do We Need TEE?

Steven C. Horton, MD, FASE

4:50 pm–5:10 pm

Echo Clues to Evaluation of Intracardiac Masses: Which Should Be Removed Surgically?

Kwan-Leung Chan, MD

Tuesday, June 29

5:10 pm-5:30 pm

PFO and ASD Closure From an Interventionalist Perspective: Practical Advice About TEE and ICE Guidance

E. Murat Tuzcu, MD

Educational Objective: Upon completion of this session, participants will be more familiar with echo in the stroke patient, including contemporary clinical use of echo in TIA or stroke, echo's clues to evaluation of intracardiac masses, and practical advice about TEE and ICE guidance in PFO and ASD closure from an interventionalist perspective.

4:00 pm-5:30 pm

Room 32

X11 – Meet the Experts/How To

How to Evaluate Left Atrial Size and Function

*Chairs: James V. Talano, MD, MM, FAHA
Susan E. Wieggers, MD, FASE*

4:00 pm-4:20 pm

Epidemiological Aspects of Left Atrial Size

James B. Seward, MD, FASE

4:20 pm-4:40 pm

Basics of Left Atrial Function in Health and Disease

Brian D. Hoit, MD, FASE

4:40 pm-5:00 pm

Can Echo Doppler Predict Left Atrial Failure?

Christopher P. Appleton, MD

5:00 pm-5:30 pm

New Insights from Tissue Doppler and Pulmonary Vein Flow

Jae K. Oh, MD

Educational Objective: Upon completion of this session, participants will integrate how to evaluate left atrial size and function into clinical practice, including epidemiological aspects of left atrial size, basics of left atrial function in health and disease, and new insights from tissue Doppler and pulmonary vein flow.

4:00 pm-5:30 pm

Room 30 C-E

S11 – Sonographer Track

The Detection of Cardiovascular Disease: Obtaining the Perfect Image

*Chairs: Wael A. Jaber, MD
Alex Neumann, BS, RDCS*

4:00 pm-4:30 pm

The Limitations of Stress Echocardiography. Techniques and Technology to Improve Accuracy and Diagnostic Outcomes

Brian A. Haluska, MSc, RDCS, AMS, FASE

4:30 pm-5:00 pm

Comparison of Cardiac Imaging Techniques: Where Does Echo Win?

*David B. Adams, RDCS, FASE
Sidney K. Edelman, PhD*

5:00 pm-5:30 pm

The Future of Cardiac Imaging: Where Are We Going?

Wael A. Jaber, MD

Educational Objective: To acquaint the sonographer with advances in echocardiography to improve the diagnostic yield of stress echo. Participants will become familiar with other cardiac imaging modalities and understand the role of echocardiography in the clinical care of the cardiac patient.

4:00 pm-5:30 pm

Room 30 A-B

CC11 – Core Curriculum

Cardiomyopathies: Too Thick, Too Weak, Too Stiff

*Chairs: Cris D. Gresser, RN, RDCS, FASE
Kathryn J. Ascah, MD, FASE*

4:00 pm-4:10 pm

Overview-Definitions

Amie A. Majerus, RDCS

4:10 pm-4:30 pm

Dilated Cardiomyopathy

Edward F. Gibbons, MD, FASE

4:30 pm-5:00 pm

Hypertrophic Cardiomyopathy

Laura M. Perrotta, BS, RDCS

5:00 pm-5:30 pm

Restrictive Cardiomyopathy

Janel M. Mays, BA, RN, RDCS

Educational Objective: Upon completion of this session, participants will understand the anatomy, pathophysiology and echocardiographic features of dilated, hypertrophic and restrictive cardiomyopathy.

4:00 pm-5:30 pm

Room 29

PE11 – Pediatric Track

Imaging and Decision-Making in the Adult with Congenital Heart Disease

*Chairs: Angela M. Sharkey, MD
Mary Etta King, MD*

4:00 pm-4:30 pm

Challenging Cases in the Adult after TOF Repair

Tal Geva, MD, FASE

4:30 pm-5:00 pm

Challenging Cases in the Adult with TGA after Atrial Switch

Daniel J. Murphy, Jr, MD

5:00 pm–5:30 pm

Challenging Cases in the Pregnant Adult with Congenital Heart Disease

Heidi M. Connolly, MD

Panel Discussion

Educational Objective: Upon completion of this session, participants will be able to better appreciate the utility of multiple imaging techniques in assessing the adult after surgical repair of tetralogy of Fallot, the adult after surgical palliation of transposition of the great arteries using the atrial switch procedure, and the pregnant adult with various forms of congenital heart disease.

Special Event

5:30 pm–7:00 pm

Echo Jeopardy!

Room 20 A-C

Host: John Gorcsan, III, MD, FASE

Technical Assistant: Sunil Mankad, MD, FCCP

Defending Champion: Itzhak Kronzon, MD, FASE

Challengers:

William J. Stewart, MD, FASE

William A. Zoghbi, MD, FASE

Educational Objective: Upon completion of this session, participants will become more familiar with diagnostically challenging echo case studies and the expert's fast-paced approach.

Wednesday, June 30

7:00 am–8:00 am

Continental Breakfast

Exhibit Hall D

7:00 am–4:00 pm

Registration

Level One Foyer–Hall D

10:00 am–1:00 pm

Exhibits Open

Halls D, E

7:00 am–2:00 pm

CyberSpASE Café Open

Grand Lobby

11:30 am–1:00 pm

Box Lunches

*Served in Exhibit Halls D, E
(ticketed attendees only)*

Concurrent Sessions

8:00 am–9:30 am

Room 20 A-C

G12 – Disease Focus

Disease of the Day: Coronary Artery Disease

Chairs: Julius M. Gardin, MD, FASE

Julio E. Perez, MD, FASE

8:00 am–8:20 am

Coronary Disease Ideas in Evolution: “Super HDL” (ApoA-I Milano) Insights from Intravascular Ultrasound

E. Murat Tuzcu, MD

8:20 am–8:35 am

Perfusion Imaging 2004: A View to the Capillaries

Sanjiv Kaul, MD, FASE

8:35 am–8:50 am

Stress Echocardiography: What Should We Be Doing Today?

Thomas H. Marwick, MD, PhD

8:50 am–9:05 am

What is the Role of Tissue Doppler and Strain Imaging in Ischemia/Viability?

James D. Thomas, MD

9:05 am–9:30 am

Putting it All Together, Now and for Tomorrow

Harvey Feigenbaum, MD, FASE

Educational Objective: Upon completion of this session, participants will integrate the contemporary role of echocardiography in coronary artery disease for clinical practice including; insights from intravascular ultrasound, perfusion imaging, stress echocardiography, the role of tissue Doppler and strain imaging in ischemia/viability and a view to the future.

8:00 am–9:30 am

Room 20 D

A12 – Cases

My Greatest Cases of CAD and its Complications

Chair: Pravin M. Shah, MD

Case Presenters:

Sharon L. Mulvagh, MD

Karl Q. Schwarz, MD

Craig H. Scott, MD

Justina C. Wu, MD

Pravin M. Shah, MD

Educational Objective: Upon completion of this session, participants will have interacted with the faculty to become more familiar with recognizing routine and unusual complications of coronary disease and acute myocardial infarction.

Wednesday, June 30

8:00 am–9:30 am

Room 33

H12 – Special Sessions

Endocarditis: Contemporary Diagnosis and Management

Chairs: Arthur J. Labovitz, MD, FASE

Patricia A. Pellikka, MD

8:00 am–8:20 am

Pathophysiology and Update on Diagnostic Criteria: An Infectious Disease Perspective

Francesca J. Torriani, MD

8:20 am–8:40 am

Appropriate Use of Echocardiography: When to Use TEE

Malissa J. Wood, MD

8:40 am–8:55 am

Case Studies in Complications of Endocarditis

Vincent L. Sorrell, MD, FASE

8:55 am–9:10 am

Prosthetic Valve Endocarditis

Marcus F. Stoddard, MD

9:10 am–9:30 am

Intraoperative TEE for Endocarditis Surgery

Roger L. Click, MD, PhD

Educational Objective: Upon completion of this session, participants will appreciate the contemporary role of echocardiography in diagnosis and management of endocarditis, including appropriate use of echocardiography, when to use TEE, prosthetic valve endocarditis, and intraoperative TEE for endocarditis surgery.

8:00 am–9:30 am

Room 32

X12 – Special Session

Joint Session with Society of Vascular Ultrasound: Current Topics in Peripheral Vascular Ultrasound

Chairs: Itzhak Kronzon, MD, FASE

R. Eugene Zierler, MD

8:00 am–8:20 am

Why Should an Echocardiographer Become Involved with Vascular Ultrasound?

Shunichi Homma, MD

8:20 am–8:40 am

Look to the Vessel Wall: Lessons from Clinical Trials

Itzhak Kronzon, MD, FASE

8:40 am–9:00 am

Arterial Testing in the Vascular Laboratory: Direct vs. Indirect

Bonnie L. Johnson, RVT, RDMS

9:00 am–9:20 am

The Role of Duplex Scanning in Selecting Patients for Renal Artery Interventions

R. Eugene Zierler, MD

9:20 am–9:30 am

Discussion

Educational Objective: Upon completion of this session, participants will appreciate topics in vascular ultrasound, including lessons from clinical trials, arterial testing in the vascular laboratory, and the role of duplex scanning in selecting patients for renal artery interventions.

8:00 am–9:30 am

Room 31

D12 – Special Session

The Special Role of the Echo Lab Nurse

Chair: Jan Nelson, RN

8:00 am–8:22 am

TEE: How to Maximize Efficiency and Safety for the Patient

Katherine G. Gattis, MSN, CNS

8:22 am–8:44 am

The Essentials of Awake Sedation for TEE: Tricks of the Trade

Kathleen Furlong, RN

8:44 am–9:06 am

ECGs During Stress Echo: What Do I Need to Worry About?

Cynthia S. Buonamia, RN, BSN

9:06 am–9:30 am

The Keys To Success with Nurse-Supervised Stress Echo

Susan Lovell, RN

Educational Objective: Upon completion of this session, participants will appreciate the special role of the echo lab nurse, including how to maximize efficiency and safety for the TEE patient, the essentials of awake sedation for TEE, ECGs during stress echo, and the keys to success with nurse-supervised stress echo.

8:00 am–9:30 am

Room 30 G-E

S12 – Sonographer Track

Exploring New Paradigms. The Great Debates: 3D and Contrast Echo

Moderators: Vera H. Rigolin, MD, FASE

Rick Rigling, BS, RDGS, FASE

8:00 am–8:45 am

3D Echo Should Replace 2D Echo for Routine Clinical Use

Pro: Joseph Kisslo, MD, FASE

Con: Marti L. McCulloch, BS, RDGS, FASE

8:45 am–9:30 am

Contrast Echocardiography is the Future Gold Standard for the Diagnosis of Ischemia

Pro: Serena Michelle Bierig, MPH, RDGS

Con: Timothy P. Obarski, DO

Educational Objective: To review and understand the expanding roles of 3D echo and contrast echo in the modern lab.

8:00 am–9:30 am

Room 30 A-B

CC12 – Core Curriculum

Echo Stat! What You Need to Know

*Chairs: Fletcher A. Miller, Jr., MD, FASE
Cris D. Gresser, RN, RDGS, FASE*

8:00 am–8:15 am

Cardiac Arrest

Alan D. Waggoner, MHS, RDGS

8:15 am–8:30 am

Stat to the Cath or EP Lab

Marian Limacher, MD

8:30 am–8:45 am

The Post-op Patient Doing Badly

Fletcher A. Miller, Jr., MD, FASE

8:45 am–9:00 am

Chest Pain in the ER

Kim M. Andreen, RDGS

9:00 am–9:15 am

Patient Can't Breathe

Rebecca T. Hahn, MD

Educational Objective: Upon completion of this session, participants will understand the echocardiographic features of the most common causes of cardiac arrest, chest pain and other emergency situations in which echo plays an important role.

8:00 am–9:30 am

Room 29

PE12 – Pediatric Track

Echocardiography and Risk Stratification for Sudden Cardiac Death

*Chairs: Fredrick Z. Bierman, MD
James Huhta, MD*

8:00 am–8:25 am

Screening for Hypertrophic Cardiomyopathy vs. the “Athletic” Heart

David J. Sahn, MD, FASE

8:25 am–8:50 am

Congenital Coronary Anomalies

Peter C. Frommelt, MD

8:50 am–9:15 am

Beyond Marfan’s Syndrome: The Dilated Aortic Root in Pediatric Heart Disease

Nancy A. Ayres, MD

9:15 am–9:30 am

Panel Discussion

Educational Objectives: Upon completion of this session, participants will be able to 1) identify echocardiographic features of hypertrophic cardiomyopathy that differentiate that disease from the adolescent with the non-pathologic “athletic” heart; 2) to recognize the various forms of congenital coronary anomalies, particularly the forms associated with sudden cardiac death, and the echocardiographic techniques utilized to optimize coronary imaging; and 3) to appreciate the various etiologies associated with and the imaging techniques utilized to identify aortic root dilatation in pediatric heart disease.

Special Event

Don't miss the 5th Annual Feigenbaum lecture in honor of Harvey Feigenbaum, MD, FASE, ASE's first president.

9:30 am–10:00 am

Room 20 A-C

G13 – Feigenbaum Lecture

Echocardiography is the Keystone to the Evaluation of Cardiac Function

*Introduction: Harvey Feigenbaum, MD, FASE
Feigenbaum Lecturer: Mario J. Garcia, MD*

Educational Objective: Upon completion of this special session, participants will become more familiar with the critically important role of echocardiography in the evaluation of cardiac function.

10:00 am– 10:30 am

Break

ATTENDEES ARE INVITED TO VISIT THE EXHIBITS AND REFRESHMENT AREA ON THE EXHIBIT FLOOR

Concurrent Sessions

10:30 am–12:00 pm

Room 20 (A-C)

G14 – Special Session

Joint Symposium with Society for Cardiovascular Magnetic Resonance: Focus on Myocardial Viability

*Chairs: Richard L. Popp, MD, FASE
Farooq A. Chaudhry, MD*

10:30 am–10:50 am

Why Assess Cardiac Viability?

Shahbudin Rahimtoola, MD

Wednesday, June 30

10:50 am–11:10 am **Why Use Dobutamine Echocardiography?**

Miguel A. Quiñones, MD

11:10 am–11:30 am **Why Use Nuclear Imaging?**

Jamshid Maddahi, MD

11:30 am–11:50 am **Why Use MRI?**

Raymond J. Kim, MD

11:50 am–12:00 pm **Group Discussion**

Educational Objective: Upon completion of this special session, participants will be more familiar with multi-modality approaches to assess for cardiac viability including, dobutamine echocardiography, nuclear imaging, and magnetic resonance imaging.

10:30 am–12:00 pm

Room 20 D

A14 – Cases

Read With the Experts: Advanced Stress Echo

Chairs: Julio E. Perez, MD, FASE

Patricia A. Pellikka, MD

Case Presenters:

Patricia A. Pellikka, MD

Stephen G. Sawada, MD

Julio E. Perez, MD, FASE

John M. Dent, MD

Harvey Feigenbaum, MD, FASE

Educational Objective: Upon completion of this session, participants will have interacted with the faculty to become more familiar with routine and clinically challenging cases of stress echocardiography.

10:30 am–12:00 pm

Room 33

H14 – Special Sessions

Contrast Echo: State-of-the-Art 2004

Chairs: Anthony N. DeMaria, MD, FASE

Shintaro Beppu, MD

10:30 am–10:50 am **Where We've Been and Where We're Going**

Anthony N. DeMaria, MD, FASE

10:50 am–11:05 am **Applications for Acute Coronary Syndromes**

Kevin Wei, MD

11:05 am–11:20 am **Chronic CAD: Evolving Applications**

Roxy Senior, MD, DM, FRCP, FESC

11:20 am–11:35 am **Contrast Stress Echo is for Today**

Thomas R. Porter, MD

11:35 am–11:55 am **What is Needed for Perfusion Echocardiography to Become Mainstream Clinically**

Arthur E. Weyman, MD, FASE

Educational Objective: Upon completion of this session, participants will appreciate special topics in contrast echo, including applications for acute coronary syndromes, chronic CAD, contrast stress echo, and what is needed for perfusion echocardiography to become mainstream in clinical practice.

10:30–12:00

Room 32

X14 – Meet the Experts/How To

How to Use Intracardiac Ultrasound

Chairs: Richard E. Kerber, MD, FASE

Satish Kumar Kaushik, MD

10:30 am–10:50 am **Development and Overview**

Richard E. Kerber, MD, FASE

10:50 am–11:10 am **Guidance of ASD and PFO Closure**

Michael Brook, MD

11:10 am–11:30 am **Role of Echo in Catheterization and EP Labs**

Steven A. Goldstein, MD

11:30 am–11:50 am **Newer Systems and the Future of ICE**

Frank E. Silvestry, MD, FASE

11:50 am–12:00 pm **Panel Discussion**

Educational Objective: Upon completion of this session, participants will appreciate how to use intracardiac ultrasound for the following: guidance of ASD and PFO closure, catheterization and EP labs, and newer systems for the future of ICE.

10:30 am–12:00 pm

Room 31

D14 – Controversies/Debates

Novel Approaches To Diagnose CAD

Chairs: Gees A. Visser, MD

Karla M. Kurrelmeier, MD

10:30 am–10:50 am **CT Scanning of the Coronaries: What is its Role Today?**

Daniel S. Berman, MD

10:50 am–11:10 am **Magnetic Resonance Imaging of the Coronaries: Is This the Future?**

Michael V. McConnell, MD

11:10 am–11:25 am **Should Echo Be Used to Evaluate Chest Pain in the ER?**

J. V. Nixon, MD

11:25 am–11:40 am **Transthoracic Imaging and Doppler of Coronaries: Is this Feasible?**

Paolo Voci, MD, PhD

11:40 am–11:55 am

EuroEcho 2003 Young Investigator Award
Validation of a New Doppler Power-Based Method for Invasive Volumetric Measurement of Coronary Blood Flow and Flow Reserve in Humans Versus PET

Philipp A. Kaufmann, MD

Educational Objective: Upon completion of this session, participants will become familiar with novel approaches to diagnose CAD, including CT scanning of the coronaries, magnetic resonance imaging, use of echo to evaluate chest pain in the ER, transthoracic imaging and Doppler of coronaries and of a new Doppler power-based method for volumetric measurement of coronary blood flow.

10:30 am–12:00 pm

Room 30 G-E

S14 – Sonographer Track

The Experts Discuss their Most Interesting Cases

*Chairs: Michael H. Picard, MD
David B. Adams, RDCS, FASE*

Presenters:

*Michael H. Picard, MD
Eileen M. Nemecek, RDCS, FASE
David B. Adams, RDCS, FASE
Alan S. Pearlman, MD, FASE
Priscilla J. Peters, BA, RDCS, FASE*

Educational Objective: To review the role of echocardiography in unusual cases.

10:30 am–12:00 pm

Room 30 A-B

CC14 – Core Curriculum

Cases, Cases: Test What You've Learned

*Chairs: Judy Rosenbloom, RDCS, FASE
Donna Zwas, MD, FASE*

Presenters:

*Donna Ehler, BS, RDCS, FASE
Sharon M. Bibb, BS, RDCS, RDMS, RVT
Marti L. McCulloch, BS, RDCS, FASE
Patrick D. Coon, RDCS, RCVT*

Educational Objective: To provide a series of cases further illustrating the material covered in the core curriculum. Participants will have a chance to test their interpretive skills.

10:30 am–12:00 pm

Room 29

PE14 – Pediatric Track

New Technologies in Pediatric Echocardiography

*Chairs: Gerald Marx, MD, FASE
J. Geoffrey Stevenson, MD, FASE*

10:30 am–10:50 am

Clinical Applications of 3D Echo in Congenital Heart Disease

Mark S. Sklansky, MD

10:50 am–11:10 am

Clinical Applications of Tissue Doppler in Congenital Heart Disease

Benjamin W. Eidem, MD, FASE

11:10 am–11:30 am

Applications of Focused Ultrasound in Congenital Heart Disease

Shuping Ge, MD

11:30 am–11:50 am

The Role of Echocardiography in Resynchronization Therapy

Richard V. Williams, MD

11:50 am–12:00 pm

Questions and Answers

Educational Objective: Upon completion of this session, participants will have a better understanding of the clinical applications of new echocardiographic technologies in pediatric heart disease, including 3-dimensional echocardiography, tissue Doppler imaging, therapeutic ultrasound, and resynchronization therapy.

Abstract Poster Session 5

Exhibit Halls D, E

Presented: 10:00 am–1:00 pm

Moderated: 10:30 am–12:00 pm

Moderators: 1. Julius M. Gardin, MD, FASE
2. Rajan Manjuran, MD

Cardiomyopathies, Outcomes Research, and Vascular Heart Disease

Moderated Posters P5-01–P5-17

P5-01 Acute Effects of Cardiac Resynchronization: Insight from Echo Derived dP/dt

Dali Fan, Jagmeet P Singh, Robert J Glanz, Sandra Nicol, Theofanie Mela, Michael H Picard. Massachusetts General Hospital, Boston, MA

P5-02 Left Ventricular Dimension and Mass are Associated with fat Free Mass and not Training Status in Endurance Athletes

Gillian A Whalley, Robert N Doughty, Greg D Gamble, Helen C Oxenham, Helen J Walsh, James C Baldi. University of Auckland, Auckland, New Zealand

- P5-03 The Prevalence of Asynchrony in Patients with Heart Failure and Normal QRS Duration Compared to Normal Controls**
Thomas M Meyer, Angel R Leon, Dean Notabartolo, John Merlino, Andrew L Smith. Emory Crawford Long Hospital, Atlanta, GA
- P5-04 Residual Systolic Anterior Mitral Motion After Septal Ablation for Hypertrophic Cardiomyopathy: Role of Septal Topography**
Mordehay Vaturi, Francesca Nesta, Khurram Shahzad, Danita Yoerger, Igor F Palacios, Mark D Handschumacher, Chaim Yosefy, Patricia A Lowry, Gus J Vlahakes, Judy Hung, Michael H Picard, Michael A Fifer, Robert A Levine. Massachusetts General Hospital, Boston, MA
- P5-05 Transthoracic Echocardiography Provides Effective Diagnosis of Left Ventricular Assist Device Dysfunction**
Steven C Horton, Marsha L McIntosh, Peter F Chatelain, Reza A Khodavertlian, Benjamin D Horne, Joseph B Muhlstein, James W Long. LDS Hospital, Salt Lake City, UT
- P5-06 Pulmonary vein Doppler Profiles Better Predict the Hemodynamic Improvement Post Pericardiocentesis in Cardiac Tamponade Compared to the Current Standards**
John G Morgan, Malissa J Wood, Dali Fan, Arthur E Weyman. Massachusetts General Hospital, Boston, MA
- P5-07 Impact of LVAD Unloading on Mitral Valve Function**
Allen G Borowski¹, Zoran B Popovic², Richard W Troughton¹, Michael L Yeager¹, James D Thomas¹, Brian P Griffin¹, Randall C Starling¹, Patrick M McCarthy¹, Kathryn J Grande-Allen². ¹The Cleveland Clinic Foundation, Cleveland, OH; ²Rice University, Houston, TX
- P5-08 Value of Doppler Tissue Imaging and Plasma NT-proBNP Level for Detection of Myocardial Dysfunction in Patients with Adriamycin-Based Chemotherapy**
Seok-Min Kang, Hee-Jung Lee, Ji-Young Kim, Jong-Won Ha, Se-Joong Rim, Namsik Chung. Yonsei Cardiovascular Center, Seoul, Republic of Korea
- P5-09 Distributions of Left Ventricular Mass in Children and Adolescents: What is the Right Index?**
Philip R Khoury¹, Stephen R Daniels¹, Samuel S Gidding², Thomas R Kimball¹. ¹Cincinnati Children's Hospital Medical Center, Cincinnati, OH; ²Nemours Cardiac Center, Wilmington, DE
- P5-10 Left Ventricular Torsional Deformation in Hypertrophic Obstructive Cardiomyopathy**
Yuichi Notomi, Takahiro Shiota, Dimitri Desserrano, Neil L Greenberg, James D Thomas. Cleveland Clinic Foundation, Cleveland, OH
- P5-11 Left Atrial Volume Predicts Atrial Fibrillation After Coronary Artery Bypass Surgery**
Martin Osraneck, Keiji Ujino, Sanderson Cauduro, Brandon Grossardt, James B Seward. Mayo Clinic, Rochester, MN
- P5-12 Intracardiac Doppler Echocardiographic Assessment of Left Atrial Function Pre and Post Pulmonary Vein Isolation for Prediction of Short-Term Recurrence of Atrial Fibrillation**
Hirotosugu Yamada, Atul Verma, Nasir F Marrouche, Andrea Natale, James D Thomas, Richard A Grimm. Cleveland Clinic Foundation, Cleveland, OH
- P5-13 Clinical and Echocardiographic Predictors of First Ischemic Stroke in Patients without a History of Atrial Fibrillation**
Yoko Miyasaka, Marion E Barnes, James B Seward, Kent R Bailey, Teresa S M Tsang. Mayo Clinic, Rochester, MN
- P5-14 A Cardiovascular Imaging Protocol—Can We Increase the Clinical Value of the Echo Exam?**
Bruce J Kimura¹, Elan Hekier¹, James N Phan¹, Anthony N DeMaria². ¹Scripps Mercy Hospital, San Diego, CA; ²University of California, San Diego, CA
- P5-15 A Semi-Automated Border Detection Program That Facilitates Clinical Use of Ultrasound Carotid Intima-Media Thickness Measurements**

James H Stein¹, Claudia E Korcarz¹, Maureen E Mays¹, Pamela S Douglas¹, Diane Paine², David Gustafson², Liexang Fan². ¹University of Wisconsin Medical School, Madison, WI; ²Siemens Medical Solutions, Issaquah, WA

- P5-16 Abdominal Aortic Aneurysm Screening during Transthoracic Echocardiography in an Unselected Population**
Sebastian C A Bekkers, Jos Habets, Emiel C Cheriex, Andrea Palmans, Yigal Pinto, Leo Hofstra, Harry J G Crijns. University Hospital Maastricht, Maastricht, Netherlands
- P5-17 Carotid Artery Intimal Medial Thickness and Distensibility in Primary Amyloidosis**
Karen Modesto, Angela Dispenzieri, Sanderson Cauduro, Bijoy Khandheria, James Seward, Martha Lacy, Jamil Tajik, Morie Gertz, Theodore Abraham. Mayo Clinic, Rochester, MN

Ischemic Heart Disease

Posters P5-18–P5-34

- P5-18 Preoperative TEE versus Gadolinium-enhanced Cardiac MRI as a Predictor of Myocardial Wall Motion after Coronary Bypass**
Svetlana Barbarash, Simon Cheung, Abid Husain, Craig Saunders, Marc Cohen, Chunguang Chen. Newark Beth Israel Medical Center, Newark, NJ
- P5-19 Assessment Of Reperfusion By Doppler Tissue Imaging; DTI In Patients With First ST- Elevation Myocardial Infarction**
Mohsen Gaballa¹, Gundars Rasmanis, Jan van der Linden, Neil Brass, Pokee Cheung, Randy Williams, Ken O'Riley, Michael Chan, Lars Ake Brodirt². ¹Department of cardiology, Royal Alexandra Hospital, Edmonton, AB, Canada; ²Department of cardiology, Karolinska Hospital, Stockholm, Sweden
- P5-20 Role of Intraoperative Transesophageal Echocardiography In Patients Having CABG**
Fatema E Qaddoura, Karen L Mecklenburg, Krishnaswamy Chandrasekaran, Martin D. Abel, Hartzell V. Schaff. Mayo Clinic, Rochester, MN
- P5-21 Obesity as a Risk Factor for Coronary Artery Disease in Patients Referred for Dobutamine Stress Echocardiogram**
Shrikanth P Y Upadya¹, Rahul Pannala¹, Sripal Bangalore², Asif Malik², Muhammad Z Malik², Randy Cohen², Siu- Sun Yao², Farooq A Chaudhry². ¹Bridgeport Hospital, Yale University School of Medicine, Bridgeport, CT; ²St. Luke's-Roosevelt Hospital, New York, NY
- P5-22 Ischemic Mitral Regurgitation is Underestimated by The Proximal Isovelocity Surface Area Method: Comparison with Quantitative Doppler and Two-Dimensional Echocardiography**
Lay-Pheng Koh, Hong Yang, Lin Han, Lieng H Ling. National University of Singapore, Singapore, Singapore
- P5-23 Resting Echocardiographic Predictors of Myocardial Perfusion Defects by SPECT and Angiographic Coronary Artery Stenosis**
Su Min Chang¹, Sherif N Naguet². ¹University of Wisconsin, Madison, WI; ²Baylor College of Medicine, Houston, TX
- P5-24 Murine Models of Ischemia-reperfusion: Can Echocardiography Measure the Area at Risk and the Infarct Size?**
Ana Clara T Rodrigues¹, Ryuji Hataishi¹, Fumito Ichinose¹, Kenneth D Bloch¹, Genevieve Derumeaux², Michael H Picard¹, Marielle Scherrer-Crosbie¹. ¹Massachusetts General Hospital- Harvard Medical School, Boston, MA; ²INSERM E 9920, Rouen University, Rouen, France
- P5-25 Novel Diagnostic Triage of Early Stage of Acute Myocardial Infarction: Combination of Rapid Heart-Type Fatty Acid Binding Protein And Wall Motion Analysis Using Echocardiography at The Emergency Room**
Eiichi Nagashima¹, Takahiro Ota¹, Hirayama Michihiko¹, Hitomi Kawano¹, Kenji Shimeno¹, Keiji Nagae¹, Shiro Yanagi¹, Kazuyoshi Hirota¹, Junichi Yoshikawa². ¹Division of Cardiology, Fuchu Hospital, Izumi, Japan; ²Division of Cardiology, Osaka City University School of Medicine, Osaka, Japan

P5-26 Presence of Echocardiographic Mitral Annular Calcification Predicts Regional Wall Motion Abnormalities in Patients with Normal Left Ventricular Ejection Fraction

Christian S Breburda, Keith Hickey, Jiang Xiaozhang, Homeyar Dinshaw, Richard Milani. Heart and Vascular Institute, Ochsner Clinic Foundation, New Orleans, LA

P5-27 Left Ventricular Mass in a Young Adult Cohort with Low Cardiovascular Risk: the CARDIA Study

Samuel S Gidding¹, Mercedes Carnethon², Julius Gardin³, Kiang Liu², Steve Sidney⁴, David Jacobs⁵, Steven Daniels⁶. ¹Nemours Cardiac Center, Wilmington, DE; ²Northwestern University, Chicago, IL; ³St. Johns Hospital and Medical Center, Detroit, MI; ⁴Kaiser Permanente, Oakland, CA; ⁵University of Minnesota, Minneapolis, MN; ⁶Cincinnati Children's Hospital, Cincinnati, OH

P5-28 Tissue Doppler Echocardiographic Evidence of Silent Myocardial Dysfunction in Patients with Coronary Artery Disease without Evidence of Myocardial Infarction

Cheuk-Man Yu, Qing Zhang, Hong Lin, Gabriel Wai-Kwok Yip, Jeffrey Wing-Hon Fung, Shun-Ling Kong, Wilson Chan, K. K. Tse, Leo C C Kum, Eugene B Wu, Y.Y. Lam, John E Sanderson. The Chinese University of Hong Kong, Hong Kong, Hong Kong Special Administrative Region of China

P5-29 Early Clinical Results of Chordal Cutting for Severe Ischemic Mitral Regurgitation

Aki Kitamura, Tomoko Tani, Minako Tani, Masatake Sato, Koichi Tamita, Syuichiro Kaji, Atsushi Yamamuro, Kunihiko Nagai, Kazuaki Tanabe, Kenichi Shiratori, Hidetaka Wakiyama, Shigefumi Morioka, Yukikatsu Okada. Kobe General Hospital, Kobe, Japan

P5-30 Quick and Simple Screening of Impaired Hemodynamics in Patients with Acute Myocardial Infarction Using Tei Index

Kunitugu Takasaki¹, Yutaka Otsuji², Shiro Yoshifuku², Eiji Kuwahara², Toshinori Yuasa², Keiko Matsukida², Shin-ichi Minagoe², Chuwa Tei², Takashi Murayama², Toshiro Kumanohoso², Tatsuru Matsuoka¹, Kouichi Toyonaga³, Hitoshi Toda³. ¹Division of Cardiology, National Hospital, Kyushu Cardiovascular Center, Kagoshima City, Japan; ²First Department of Internal Medicine, Kagoshima University School of Medicine, Kagoshima City, Japan; ³Division of Cardiology, Kagoshima City Hospital, Kagoshima City, Japan

P5-31 Echocardiographic Evaluation of the Effect of Autologous Bone Marrow Stem Cells Mobilization with Granulocyte-Colony Stimulating Factor on the Left Ventricular Remodeling and Function in Post-Infarction Rats

Guoqian Huang, Hong Liu, Xianhong Shu, Cuizhen Pan, Naisheng Cai, Junbo Ge. Zhongshan Hospital, Fudan University, Shanghai, China

P5-32 Early Left Ventricular Thrombus after Acute Myocardial Infarction in the Era of Primary Coronary Intervention and Glycoprotein IIb/IIIa Inhibitors

Arshad Rehan, Renee L Bess, Manpreet Kanwar, Sujood Ahmed, Arshad Ali, Howard S Rosman, Julius M Gardin, Gerald I Cohen. St. John Hospital & Medical Center, Detroit, MI

P5-33 Left Ventricular Remodeling is Less While Left Atrial Remodeling is Greater in Inferior Compared to Anterior Myocardial Infarction

Hui Zhang, Yutaka Otsuji, Takeshi Uemura, Toshiro Kumanohoso, Bo Yu, Xiaoyan Zhou, Yuko Maki, Keiko Yuge, Akira Kisanuki, Shinichi Minagoe, Chuwa Tei. Kagoshima University Faculty of Medicine, Kagoshima City, Japan

P5-34 Left Atrial Diameter as an Independent Predictor of First Clinical Cardiovascular Events in Middle-Aged and Elderly Adults: The Strong Heart Study

Jorge R Kizer¹, Jonathan N Bella², Vittorio Palmieri¹, Jennifer E Liu¹, Lyle G Best³, Elisa T Lee⁴, Richard R Fabsitz², Mary J Roman¹, Barbara V Howard⁵, Richard B Devereux¹. ¹Weill Medical College of Cornell University, New York, NY; ²Albert Einstein College of Medicine, Bronx, NY; ³Aberdeen Area Tribal Charimen's Health Board, Rapid City, SD; ⁴University of Oklahoma Health Sciences Center, Oklahoma City, OK; ⁵National Heart Blood and Lung Institute, Bethesda, MD; ⁶Medstar Research Institute, Washington, DC

New Technology: Development & Applications (II)

Posters P5-35–P5-42

P5-35 Tissue Synchronization Imaging Detects Dyssynchrony in Subjects with Systolic Dysfunction and Differing QRS Morphology

Gardar Sigurdsson, Deborah Agler, Zoran Popovic, Bruce L Wilkoff, James D Thomas, Richard A Grimm. Cleveland Clinic Foundation, Cleveland, OH

P5-36 Is There a Relationship Between Myocardial Brightness (Integrated Backscatter) and the Magnitude of its Cyclic Variation over the Heart Cycle?

Mark R Holland, Kirk D Wallace, James G Miller. Washington University, St. Louis, MO

P5-37 Clinical Application of a Novel Quantitative Tissue Tracking Method to Detect Left Ventricle Segments With Significant Coronary Artery Stenosis

Renan Sukmawan, Nozomi Watanabe, Maki Akiyama, Manabu Tanaguchi, Yuko Nagare, Takahiro Kawamoto, Takashi Akasaka, Kiyoshi Yoshida. Kawasaki Medical School, Kurashiki, Japan

P5-38 A Virtual Three-Dimensional Computer Model of the Heart for Interactive Echocardiographic Visualization of Heart Disease: The SONOCARD Project

Thomas Buck, Klaus J Quast, Ira A Karoussos, Raimund Erbel. University Duisburg-Essen, Essen, Germany

P5-39 Feasibility of Creating Lesions through Pericardial Fat using High-Frequency Focused Ultrasound

Kana Fujikura¹, Ryo Otsuka¹, Robert Muratore², Jie Wang¹, Kumiko Hirata¹, Frederic L Lizz², Shunichi Homma¹. ¹Columbia Presbyterian Medical Center, New York, NY; ²Riverside Research Institute, New York, NY

P5-40 Semi-Automated Measurements of Cardiac Output Using Real-Time Three-Dimensional Color Doppler Imaging

Joseph A Lodato¹, Lissa Sugeng¹, Rolf Baumann², Lynn Weinert¹, Allen S Anderson¹, Anthony Kim¹, Savitri Fedson¹, Roberto M Lang¹. ¹University of Chicago, Chicago, IL; ²TomTec, Munich, Germany

P5-41 Rapid Changes in Right and Left Ventricular Volumes during Prolonged Ventricular Fibrillation

Vincent L Sorrell, Kathryn L Bates, Maria Altbach, Robert Berg, Karl B Kern, Gordon A Ewy. University of Arizona, Tucson, AZ

P5-42 Reduced Velocity of Expansion in the Right Pulmonary Artery by Tissue Doppler Imaging in Severe Pulmonary Hypertension: A Novel Way to Detect Pulmonary Hypertension

Panagiotis Politis, Igal A Sebag, David Langleben, Judith Therrien, Lawrence G Rudski. Jewish General Hospital, Montreal, PQ, Canada

Outcomes Research, Miscellaneous

Posters P5-43–P5-53

P5-43 Morbid Obesity in Children and Young Adults Leads to Detrimental Left Ventricular Hypertrophy

Betty J Glascock, Sandra A Witt, Fred Jones, Philip R Khoury, Stephen R Daniels, Thomas R Kimball. Cincinnati Children's Hospital Medical Center, Cincinnati, OH

P5-44 High Prevalence of Left Ventricular Dysfunction in Patients with Peripheral Arterial Disease Referred for Echocardiography

James K Min, Kristopher M McDonough, Roberto M Lang, Kirk T Spencer, R. Parker Ward. University of Chicago, Chicago, IL

P5-45 Age, Hypertrophy and Severity of Mitral Regurgitation are Correlated with Severe Atheromatous Disease of the Aorta

Donna R Zwas¹, Nathaniel Boyer², Alyson N Owen¹, Barbara A Berko¹, David H Wiener², Jonathan D Hupper², John M Morgan¹. ¹Thomas Jefferson University Hospital, Philadelphia, PA; ²University of Pennsylvania Medical Center, Philadelphia, PA

Wednesday, June 30

- P5-46 Is It Possible to Detect Thrombus and Spontaneous Echocontrast in The Left Atrial Appendage from Transthoracic Approach?**
Eduardo Guevara, Fabian Salmo, Hector A Deschle, Ricardo Perez de la Hoz, Miguel H Bustamante Labarta, Carlos Rodriguez Correa, Augusto F Torino. Fundacion Favaloro, Buenos Aires, Argentina
- P5-47 Traditional Measurements of the Left Atrial Diameter Frequently Overestimate the Left Atrial Volume Index**
Vincent L Sorrell, Frank Molls, Kathryn L Bates. University of Arizona, Tucson, AZ
- P5-48 Hemostatic and Inflammatory Parameters in Aortic Arch Atheromatosis**
Abdolhamid Sheikhzadeh¹, Wladimir Mirau¹, Philipp Ehlermann². ¹University of Luebeck, Luebeck, Germany; ²University of Heidelberg, Heidelberg, Germany
- P5-49 REUSE: A Retrospective Evaluation of the Utility of Serial Echocardiograms**
Alisa B Rosen, Nader M Banki, Kirsten E Fleischmann, Jonathan G Zaroff, Elyse Foster. University of California, San Francisco, CA
- P5-50 Persistent High Risk of Thromboembolism in Patients with Atrial Fibrillation and Left Atrial Thrombi Documented by Transesophageal Echocardiography**
Xuedong Shen, Huagui Li, Dhanunjay Lakkireddy, Mark J Holmberg, David Cloutier, Himachala Veligandla, Karen Rovang, Tom Hee, Aryan N Moose, Syed M Mohiuddin. The Cardiac Center of Creighton University, Omaha, NE
- P5-51 Does Transesophageal Echocardiographic Demonstration of a Patent Foramen Ovale in Patients with a Recent Cerebral Ischemic Event Change Anticoagulation Therapy?**
Kimberly A Boddicker, Richard E Kerber. University of Iowa Hospitals and Clinics, Iowa City, IA
- P5-52 Routine Transesophageal Echocardiography is not Warranted in the Evaluation of Cerebral Embolic Stroke in Elderly Patients**
Sergey Vitebskiy¹, Keith Fox¹, Brian D Hoi². ¹University Hospitals of Cleveland, Cleveland, OH; ²Case Western Reserve University and University Hospitals of Cleveland, Cleveland, OH
- P5-53 Angiotensin Receptor 1 Blocker Reduces the Progression of Common Carotid Artery Intima-Media Thickness in Patients with Coronary Artery Disease**
Shinichiro Ikuta, Yutaka Hirano, Seita Akiyama, Manabu Nakano, Hajime Nakamura, Hisakazu Uehara, Mitugu Taniguchi, Takahiro Hayashi, Kinji Ishikawa. Department of Cardiology, Kinki University School of Medicine, Osaka, Japan
- Educational Objective:** To obtain insights into the latest in cardiovascular research and applications of echocardiography.

12:00 pm-12:15 pm

Break

ATTENDEES ARE INVITED TO VISIT THE EXHIBITS AND REFRESHMENT AREA ON THE EXHIBIT FLOOR

Luncheon Sessions

12:15 pm-1:15 pm

Room 20 A-C

G15 – Special Session

Joint Symposium with American Society of Nuclear Cardiology: Cardiac Risk Assessment and Prognosis

*Chairs: Harvey Feigenbaum, MD, FASE
Imran Afridi, MD*

12:15 pm-12:30 pm

Preoperative Evaluation: Nuclear Imaging Perspective

Daniel S. Berman, MD

12:30 pm-12:45 pm

Preoperative Evaluation: Echocardiographic Perspective

Thomas Ryan, MD, FASE

12:45 pm-1:05 pm

Which Test for Which Patient? Clinical Perspective

Pravin M. Shah, MD

1:05 pm-1:15 pm

Panel Discussion

Educational Objective: Upon completion of this session, participants will be familiar with cardiac risk assessment and prognosis, including the nuclear imaging perspective, the echocardiographic perspective and the clinical perspective of which test for which patient.

12:15 pm- 1:15 pm

Room 20 D

A15 – Cases

Interesting and Challenging Cases, Cases, Cases

Chair: Steven A. Goldstein, MD

Case Presenters:

Hisham Dokainish, MD

Mani A. Vannan, MBBS

Sunil Mankad, MD, FCCP

Steven A. Goldstein, MD

Educational Objective: Upon completion of this session, participants will have interacted with the faculty to become more familiar with clinically challenging and fascinating cases of cardiovascular disease.

12:15 pm-1:15 pm

Room 32

X15 – Meet the Experts/How To

You Still Don't Have a Digital Lab! Here's How to Get Started!

Chairs: James V. Talano, MD, MM, FAHA

Stephen J. Lester, MD

12:15 pm-12:30 pm

It's Simpler Than You Think: An Overview

Bijoy K. Khandheria, MBBS

12:30 pm-12:45 pm

What Are My Options, What's Right For Me?

Mario J. Garcia, MD

12:45 pm-1:00 pm

I Can't Live Without Digital Echo: Sonographer's Clinical Perspective

Jane E. Marshall, BS, RDCS, FASE

1:00 pm.-1:15 pm

I Can't Live Without Digital Echo: Physician's Clinical Perspective

Leonard E. Ginztan, MD

Educational Objective: Upon completion of this session, participants will appreciate how to start a digital echo lab, including an overview, a sonographer's clinical perspective and a physician's clinical perspective.

12:15 pm–1:15pm

Room 31

D15 – Meet the Experts/How-to

How to Perform Myocardial Contrast Echo at Rest and with Stress

*Chairs: Kevin Wei, MD
Mark J. Monaghan, PhD, FESC*

12:15 pm–12:30 pm

Microbubble Agents and System Settings: The Fundamentals

Peter N. Burns, PhD

12:30 pm–12:45 pm

Contrast for Left Ventricular Opacification: Essential for the Modern Echo Lab

Martin E. Goldman, MD

12:45 pm–1:00 pm

Contrast Stress Echo: A Practical Approach

Stephen G. Sawada, MD

1:00 pm–1:15 pm

Viable or Scar? How I use Contrast Echo

Roxy Senior, MD, DM, FRCP, FESC

Educational Objective: Upon completion of this session, participants will be more familiar with how to perform myocardial contrast echo at rest and with stress, including microbubble agents and system settings, contrast for left ventricular opacification, contrast stress echo, and how to use contrast echo for viability.

12:15 pm–1:15 pm

Room 30 C-E

S15 – Sonographer Luncheon

It's Not Just a Job: It's an Adventure!

*Chairs: Margaret L. Knoll, RDCS, FASE
Donna Ehler, BS, RDCS, FASE*

12:15 pm–12:35 pm

Bringing Echo to 3rd World Countries

Nancy D. Dalton, RDCS

12:35 pm–12:55 pm

A Day in the Life of a NASA Sonographer

David S. Martin, RVT

12:55 pm–1:15 pm

Adventures in Sonography

Judy Rosenbloom, RDCS, FASE

Educational Objective: To explore some of the new and exciting directions cardiac sonography has taken.

12:15 pm–1:15 pm

Room 29

PE15 – Pediatric Track

Strategies to Develop Pediatric Echo Research

*Chairs: Steven D. Colan, MD, FASE
Thomas R. Kimball, MD, FASE*

12:15 pm–12:40 pm

How to Create a Pediatric Echo Research Center

Sandra A. Witt, RDCS, FASE

12:40 pm–1:05 pm

The Echo “Core” Lab: Role in Translational Research

Wyman W. Lai, MD

1:05 pm–1:15 pm

Panel Discussion

Educational Objective: Upon completion of this session, participants will have a better understanding of the strategies necessary to create a pediatric echo research center and a pediatric echo “core” lab in expanding opportunities for translational and clinical pediatric echo research.

Special Event

12:15 pm–1:45 pm

Room 33

H15 – Special Sessions

Local Echo Society Summit

Moderator: Benjamin F. Byrd, III, MD

The American Society of Echocardiography is interested in the success of local echocardiography organizations and feels that future growth in the field of echocardiography would be enhanced by better coordination with such organizations both now and in the future. The primary purpose of the Local Society Assembly is to serve as a networking opportunity between members to facilitate sharing of ideas related to local societies. ASE hopes that at least one representative from all of the existing local societies is able to attend. We also invite people who are interested in starting local societies.

1:15–1:30 pm

Refreshment Break

ATTENDEES ARE INVITED TO THE CONVENTION CENTER SECOND LEVEL FOR REFRESHMENTS

Wednesday, June 30

Concurrent Sessions

1:30 pm–3:00 pm

Room 20 A-C

G16 – Special Session

ASE Research Award Update: The Products of ASE Support

Chair: TBD

1:30 pm–1:45 pm

Stress Echo and Medical Decision-Making: What Have We Learned?

Kirsten E. Fleischmann, MD, MPH

1:45 pm–2:00 pm

TEE and Cardioversion for Atrial Fibrillation: Lessons Learned From the Acute Trial

Allan L. Klein, MD, FASE

2:00 pm–2:15 pm

Arterial Health in Pregnancy

Claudia E. Korcarz, DVM, RDCS, FASE

2:15 pm–2:30 pm

Role of Echocardiography in Diagnosis and Management of Acute Congestive Heart Failure

Gerard P. Aurigemma, MD

2:30 pm–2:45 pm

Outcomes Using Telemedicine for Diagnosis of Neonatal Congenital Heart Disease

Cathy L. Webb, MD, FASE

Educational Objective: Upon completion of this session, participants will be more familiar with advances in human health supported by research grants from the American Society of Echocardiography.

1:30 pm–3:00 pm

Room 20 D

A16 – Cases

Case-based Teaching: 3D Applications

Chairs: Navin C. Nanda, MD

Mani A. Vannan, MBBS

1:30 pm–1:50 pm

Mitral Valve Disease: A Good Way To Get Started

Mani A. Vannan, MBBS

1:50 pm–2:10 pm

Does 3D Make Congenital Disease in the Adult Simpler?

David J. Sahn, MD, FASE

2:10 pm–2:25 pm

How 3D Helps Me in Clinical Practice

Takeshi Hozumi, MD

2:25 pm–2:40 pm

My Best 3D Cases: Clinical Implications

Lissa Sugeng, MD

2:40 pm–2:55 pm

2D or 3D? How Do You Choose in a Busy Lab?

Allan L. Klein, MD, FASE

Educational Objective: Upon completion of this session, participants will be more familiar with applications of 3D echo through case-based teaching, including mitral valve disease, congenital disease in the adult, and clinical implications.

1:30 pm–3:00 pm

Room 32

X16 – Meet the Experts/How To

New Frontiers in Therapeutic Echocardiography

Chairs: Issam A. Mikati, MD, FASE

Wolfgang Lepper, MD

1:30 pm–1:50 pm

Ultrasound Mediated Gene Therapy: Where Are We Now?

John M. Erikson, MD, PhD

1:50 pm–2:10 pm

Targeted Microbubbles: A New View to the Molecule

Flordeliza S. Villanueva, MD

2:10 pm–2:30 pm

Sonothrombolysis: Future Directions

Thomas R. Porter, MD

2:30 pm–2:50 pm

Novel Therapeutic Applications of High Intensity Focused Ultrasound

Shunichi Homma, MD

2:50 pm–3:00 pm

Panel Discussion

Educational Objective: Upon completion of this session, participants will appreciate new frontiers in therapeutic ultrasound, including ultrasound mediated gene therapy, sonothrombolysis, and novel therapeutic applications of high intensity focused ultrasound.

1:30 pm–3:00 pm

Room 31

D16 – Controversies/Debates

Debate – Function is Enough for Coronary Artery Disease: There is No Need for Contrast Perfusion

Moderator: Miguel A. Quiñones, MD

Pro: Nelson B. Schiller, MD

Con: Jonathan R. Lindner, MD, FASE

Educational Objective: Upon completion of this session, participants will appreciate differing viewpoints on the need for contrast to diagnose coronary disease by echocardiography.

1:30 pm–3:00 pm

Room 30 C-E

S16 – Sonographer Track

The New Era in Echocardiography

*Chairs: Jane E. Marshall, BS, RDCS, FASE
Priscilla J. Peters, BA, RDCS, FASE*

1:30 pm–2:00 pm

Hypertrophic Cardiomyopathy: The Importance of Echocardiography Before, During and After Therapeutic Management

Anitta J. Morehead, RDCS, FASE

2:00 pm–2:30 pm

Cardiology Hardware: LVADs, Wires, Catheters, Devices. Differentiation of Medical Devices by Echocardiography

Mary L. Chivington, BS, RDCS, RVT, FASE

2:30 pm–3:00 pm

Transplantation: Echocardiographic Findings and Uses in Rejection Management

Marsha L. McIntosh, RDCS

Educational Objective: To enable the sonographer to understand the role of echo in the management of patients receiving newer technological and medical treatments for their heart disease.

1:30 pm–3:00 pm

Room 29

PE16 – Pediatric Track

Evolving Management of Hypoplastic Left Heart Syndrome

*Chairs: Roger P. Vermilion, MD
Michele A. Frommelt, MD*

1:30 pm–1:50 pm

Fetal Diagnosis: Impact on Management and Palliative Strategy

Carlen A. Gomez, MD

1:50 pm–2:10 pm

Predicting Outcome: The High-risk Neonate with HLHS

Erik Michelfelder, MD

2:10 pm–2:30 pm

Surgical Alternatives to the Norwood Procedure: The RV to PA Conduit

Richard Ohye, MD

2:30 pm–2:50 pm

Staged Palliations after Norwood: The Role of Echocardiography

Craig E. Fleishman, MD

Educational Objective: Upon completion of this session, participants will be able to appreciate the most recent advances in the management of hypoplastic left heart syndrome and the role of echocardiography in the assessment of infants and children as they progress through staged palliation of this disease.

