## 22nd Annual International Conference on

# ECHOCARDIOGRAPHY AND ALLIED TECHNIQUES (MRI, CT Scan, Nuclear): Case Studies and Recent Advances

### MORE THAN 50 SUPER INTERESTING CASES FROM DIFFERENT INSTITUTIONS WILL BE SHOWN

Jointly sponsored by the Un Division of Continuing Med

Jointly sponsored by the University of Alabama School of Medicine, Division of Continuing Medical Education, University of Alabama at

> Birmingham Echocardiography Laboratories, Birmingham, Alabama, and the International Society of Cardiovascular Ultrasound

Saturday, November 3, 2012

This event is not part of the official Scientific Sessions 2012 as planned by the AHA Committee on Scientific Sessions Programming

The Westin Bonaventure Hotel and Suites 404 South Figueroa Street Los Angeles, CA 90071 Hotel phone: (213) 624-1000 Room: San Francisco, Level 2

#### **CONFERENCE DIRECTORS:**

Navin C. Nanda, MD Julius M. Gardin, MD Natesa Pandian, MD David Sahn, MD

CME CERTIFICATION NEEDED — \$50.00 NO CME CERTIFICATION NEEDED — NO CHARGE INCLUDES CONTINENTAL BREAKFAST AND REFRESHMENT BREAK

#### **Accreditation:**

The University of Alabama School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The University of Alabama School of Medicine designates this educational activity for a maximum of 7.5*AMA PRA Category 1 Credit*(s)<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the University of Alabama School of Medicine (UASOM), University of Alabama at Birmingham Echocardiography Laboratory, Birmingham, Alabama, and the International Society of Cardiovascular Ultrasound.

UAB is an Equal Opportunity/Affirmative Action Employer committed to fostering a diverse, equitable and family-friendly environment in which all faculty and staff can excel and achieve work/life balance irrespective of ethnicity, gender, faith, gender identity and expression as well as sexual orientation. UAB also encourages applications from individuals with disabilities and veterans.

While designated for credit hours, the program is not intended to provide extensive training or certification in the field.

**Purpose:** This conference is designed to provide a comprehensive review of echocardiography and allied techniques (MRI, CT Scan, Nuclear) with emphasis on case studies on valvular heart disease, endocarditis, prosthetic valves, pericardial and myocardial disorders, aortic diseases, adult congenital heart disease, and stress, tissue Doppler imaging, strain and strain rate imaging, 3 and 4-dimensional transthoracic and transesophageal echocardiography and contrast echocardiography. Although the conference is designed mainly for physicians, we invite technologists, nurses and other health professionals to attend. There are no special prerequisites for this course. The registration fee is free of charge however if CME certification is needed, the cost is \$50.00. Onsite registration will be taken until 10:00 a.m.

**Objectives:** We expect the attendees to acquire and enhance their knowledge of various aspects of echocardiography, and to be able to describe the uses of basic and some advanced ultrasound techniques for cardiac assessment; recognize normal anatomy and pathology of the heart from ultrasound images, and describe the use of Doppler ultrasound in assessment of blood flow within the heart.

#### **FACULTY**:

- Navin C. Nanda, MD, (Course Director) Distinguished Professor of Medicine and Cardiovascular Disease, University of Alabama at Birmingham, Birmingham, Alabama
- **Julius M. Gardin, MD,** (Course Director) Professor and Chair, Department of Medicine, Hackensack University Medical Center, Hackensack, New Jersey
- **Aiden Abidov**, **MD**, **PhD**, Associate Professor of Medicine and Radiology and Medical Director, Cardiovascular Imaging at UAMC, The University of Arizona, Tucson, Arizona
- **Harry Acquatella, MD**, Professor of Medicine, Universidad Central de Venezuela and Director of Echocardiography, Centro Medico, Caracas, Venezuela
- **Masood Ahmad, MBBS,** Professor of Medicine, and Director of Echocardiography, Division of Cardiology, UTMB Galveston, Galveston, Texas
- W. Patricia Inglanisorn Bandettini, MD, Staff Clinician, National Institutes of Health, and NHLBI Director, Cardiovascular MRI, Suburban Hospital National Heart, Lung, and Blood Institute, Advanced Cardiovascular Imaging Laboratory, National Institutes of Health, Bethesda, Maryland
- **Rolf Baumann, MSC,** Vice President, Clinical Products & Innovations, TomTec Imaging Systems GmbH, Munich, Germany
- Marek Belohlavek, MD, PhD, Professor of Medicine and Bioengineering, Consultant, Division in Research and Director of the Translational Ultrasound Research Laboratory, Mayo Clinic, Scottsdale, Arizona
- **Ricardo J. Benenstein, MD**, Assistant Professor of Medicine, Non Invasive Cardiology Leon H. Charney Division of Cardiology, New York University School of Medicine, New York, New York
- **Robert W.W. Biederman, MD,** Associate Professor of Medicine, Temple University College of Medicine, Director, Cardiovascular MRI, Allegheny General Hospital, and Adjunct Professor of Bioengineering, Carnegie Mellon University, Pittsburgh, Pennsylvania
- M. Jay Campbell, MD, Assistant Professor of Pediatric Cardiology, Duke University, Duke Cardiovascular Magnetic Resonance Center, Durham, North Carolina
- **Sibel Catirli Enar, MD,** Associate Professor of Cardiology, Turkiye Hospital, Istanbul, Turkey **P.A.N. Chandraratna, MD,** Professor Emeritus, University of California-Irvine School of Medicine, Irvine, California
- Mohammed Andaleeb Chowdhury, MD, MRCP (UK), Intern, University of Toledo, Toledo, Ohio
- **Reema Chugh, MD,** Consultant, Cardiology/Adult Congenital Heart Disease and Heart Disease in Pregnancy, Kaiser Foundation Hospitals, Panorama City (Los Angeles), California
- **Nathalie De Michelis, RN, BSN,** Cardiovascular Program Manager, University of California Irvine HealthCare, Orange, California
- **Jaroslaw Drozdz, MD, PhD,** Head, I Department Cardiology, Medical University of Lodz, Lodz, Poland
- **Thor Edvardsen, MD, PhD,** Professor dr. Medicine, Deputy Head, Department of Cardiology, Oslo University Hospital, Rikshospitalet, Norway
- **Galal Eldin Nagib Elkilany, MD**, Professor of Cardiology, Tanta University, Tanta, Egypt **Raimund Erbel, MD**, Professor of Medicine/Cardiology Department of Cardiology, West-German Heart Center Essen, University Duisburg-Essen, Germany
- **Nilda Espinola-Zavaleta, MD, PhD,** Professor of Echocardiography, Instituto Nacional de Cardiologia Ignacio Chavez, and Chief of Echocardiography, ABC Medical Center, Mexico City, Mexico

- **Lidiette Esquivel, MD,** Instructor in Pathophysiology and Internal Medicine, University of Costa Rica and Director, Echocardiography Laboratory, Hospital Mexico, San Jose, Costa Rica
- **Alejandro J. Forero, MD,** Professor of Medicine, Cardiology Department, Chilean Air Force Hospital and Mayor University of Chile, Santiago, Chile
- **Tony Fuisz, MD,** Director, Advanced Imaging, Medstar Washington Hospital Center, Washington, D.C.
- **Robert P. Gatewood, Jr.,** Clinical Associate Professor, SUNY at Buffalo and Cardiologist, Buffalo Cardiology and Pulmonary Associates PC, Buffalo, New York
- **Ed Gill, MD,** Professor of Medicine, Division of Cardiology, and Adjunct Associate Professor of Radiology, University of Washington School of Medicine and Director, Echocardiography, Harborview Medical Center, Seattle, Washington
- **John Gorcsan III, MD,** Professor of Medicine and Director of Echocardiography, University of Pittsburgh, Pennsylvania
- **Kaj Groundstroem, MD, PhD,** Cardiologist, Medical Officer, National Supervisory Authority for Welfare and Health, Helsinki, Finland
- **Brian D. Hoit, MD,** Professor of Medicine and Physiology and Biophysics, Case Western Reserve University and Director of Echocardiography, University Hospitals Health System, Cleveland, Ohio
- Rachel Hughes-Doichev, MD, Assistant Professor of Medicine, Temple University School of Medicine and Director of Echocardiography, Claude R. Joyner Echocardiography Laboratory, Allegheny General Hospital, Pittsburgh, Pennsylvania
- Omer Iqbal, MD, Associate Professor, Loyola University Medical Center, Maywood, Illinois Leng Jiang, MD, Professor of Medicine, Tufts University School of Medicine, Boston, Massachusetts and Director of Noninvasive Cardiology, Baystate Medical Center, Springfield, Massachusetts
- **Jaroslaw D. Kasprzak, MD,** Professor of Medicine and Head, Chair and Department of Cardiology, Medical University of Lodz, Lodz, Poland
- **Martin G. Keane, MD,** Associate Professor of Medicine and Director, Echocardiography Laboratory, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania
- **Smadar Kort, MD,** Professor of Medicine and Director, Valve Center, Non-Invasive Cardiac Imaging and Echocardiography, Stony Brook University Medical Center, Stony Brook, New York
- Vadim A. Kuznetsov, MD, PhD, Professor of Cardiology and Director, Tyumen Cardiology Center and Chairman, Russian Chapter of ISCU, Tyumen, Russia
- **Stamatios Lerakis, MD,** Professor of Medicine (Cardiology), Radiology and Imaging Sciences, Emory University School of Medicine, Atlanta, Georgia
- **Shoa-Lin Lin, MD**, Professor of Medicine, National Defense Medical College and Senior Consultant, Adult Cardiology, Yuan's General Hospital, Kaohsiung City, Taiwan
- **Joseph F. Maalouf, MD,** Professor of Medicine, College of Medicine, Director, Interventional Echocardiography and Consultant, Division of Cardiovascular Diseases and Internal Medicine, Mayo Clinic, Rochester, Minnesota
- **Kameswari Maganti, MD,** Associate Professor of Medicine, Northwestern University Feinberg School of Medicine, Chicago, Illinois
- **Wilson Mathias Jr., MD,** Director, Echocardiography, Ecocardiografia Institute do Coracao (InCor), HC-FMUSP, Sao Paulo, Brazil
- **Issam Mikati, MD,** Associate Professor, Division of Cardiology, The Feinberg School of Medicine, Northwestern University, Chicago, Illinois

- **Michele Nanna, MD,** Associate Clinical Professor of Medicine, Albert Einstein College of Medicine, and Medical Director, Cardiac Care and Vascular Medicine, PLLC, Bronx, New York
- **Cesar AS Nascimento, MD,** Scientific Coordinator, Echolab of National Institute of Cardiology, Laranjeiras, Qualified Doctoral FIOCRUZ-IPEC, Rio de Janeiro, Brazil
- **R.B. Panwar, MD,** Professor of Cardiology and Vice-Chancellor, Rajasthan University of Health Sciences, Jaipur (Rajasthan), India
- Vito Maurizio Parato, MD, Professor of Cardiology and Director, Chest Pain Unit/Echocardiography, UNIVPM and Madonna del Soccorso Hospital, San Benedetto del Tronto, Italy
- **Gerald M. Pohost, MD,** Professor, University of Southern California, Los Angeles and Professor, Loma Linda University, Loma Linda, California
- Hanumanth K. Reddy, MD, Clinical Professor of Medicine, St. Louis University Medical School, St. Louis, Missouri, Clinical Adjunct Professor of Medicine, University of Arkansas Medical School, Little Rock, Arkansas and Medical Director, Cardiovascular Services, Poplar Bluff Regional Hospital, Poplar Bluff, Missouri
- **Robert E. Safford, MD, PhD,** Professor of Medicine, Division of Cardiovascular Diseases, Mayo Clinic, Jacksonville, Florida
- Kiran B. Sagar, MD, Cardiovascular Consultant, Milwaukee, Wisconsin
- Rajat Sanyal, MD, Chairman, Division of Cardiology, Phelps Memorial Hospital, Sleepy Hollow New York, Cardiologist, Montefiore Medical Center and Clinical Assistant Professor, Albert Einstein College of Medicine, New York, New York
- **Muhamed Saric, MD, PhD,** Associate Professor of Medicine and Director of Echocardiography Lab, New York University Langone Medical Center, New York, New York
- A.K. Sarma, MBBS, MD, Chief Medical Officer, Guwahati Refinery Hospital, Guwahati, Assam Takahiro Shiota, MD, Professor of Medicine, Cedars-Sinai Medical Center and University of California-Los Angeles and Associate Director, Cardiac Noninvasive Laboratory, Cedars-Sinai Medical Center, Los Angeles, California
- **Lauren A. Simprini, MD,** Cardiology Imaging Fellow, Memorial Sloan-Kettering Cancer Center, New York-Presbyterian/Weill Cornell Medical Center, New York, New York
- **Chittur A. Sivaram, MD,** David Ross Boyd Professor, Vice Chief of Cardiovascular Section, Associate Dean for Continuing Professional development and Director, Cardiovascular Fellowship Training Program, University of Oklahoma, Oklahoma City, Oklahoma
- William J. Stewart, MD, Professor of Medicine and Director, Cardiovascular Disease Curriculum, Cleveland Clinic Lerner College of Medicine and Staff Cardiologist, Heart and Vascular Institute, Department of Cardiovascular Medicine, Section of Cardiovascular Imaging, Cleveland Clinic Foundation, Cleveland, Ohio
- **Jeane Tsutsui, MD,** Chief Medical Officer, Fleury Group, Sao Paulo, Brazil **Mani A. Vannan, MBBS,** Cardiologist, Piedmont Heart Institute, Atlanta, GA
- Cheuk-Man Yu, MD, Professor and Chairman, Head of Division of Cardiology, Department of Medicine and Therapeutics, Assistant Dean (External Affairs), Director (Clinical Services), Institute of Vascular Medicine, Prince of Wales Hospital, The Chinese University of Hong Kong

#### **Echocardiography: Case Studies and Recent Advances**

Saturday, November 3, 2012 Room: San Francisco

7:00 – 8:00 am Continental breakfast and Registration

7:55-8:00 am Welcome and Introduction - Drs. Navin Nanda

#### **CASE STUDIES**

Each faculty case presenter will be allotted 8 minutes. This will include presentation of pertinent clinical findings, echocardiogram, questions for the audience and brief discussion.

8:00 – 10:00 am Session I - Valvar Heart Disease, Ischemic Heart Disease,
Transplantation, Heart Failure, Congenital Heart Disease, Prosthetic
Valves, Endocarditis, Cardiac Masses, Speckle Imaging, 3D & 4D Echo,
Peripheral, Miscellaneous

Case Presentation and Discussion - Cases 1-16 Chairpersons: Drs. Kaj Groundstroem, Vadim A. Kuznetsov, Kiran Sagar, Rajat Sanyal

Dr. Aiden Abidov (rare tumors on cardiac MRI); Dr. Harry Acquatella (interesting case study); Dr. Mohammed Andaleeb Chowdhury (initial presentation of brucella endocarditis in a previously healthy 18 year old young man); Dr. Lidiette Esquivel (a friendly elbowing during a football (soccer) game?); Dr. Tony Fuisz (interesting CMR case); Dr. Robert P. Gatewood, Jr. (interesting case study); Dr. Jaroslaw D. Kasprzak (unusual heart failure scenario); Dr. Vadim A. Kuznetsov (novel approach in detection of coronary artery disease in the outpatient department; combination of isometric exercise and mental stress echocardiography); Dr. Stamatios Lerakis (interesting case study); Dr. Shoa-Lin Lin (echocardiographic features of pulmonary artery hypertension); Dr. Issam Mikati (interesting case study); Dr. Michele Nanna (interesting adult congenital heart disease case); Dr. Vito Maurizio Parato (interesting case study); Dr. Kiran B. Sagar (case of ruptured pulmonary valve); Dr. Rajat Sanyal (in hospital cardiac arrest with acute STEMI with complete neurologic and cardiac recovery with hypothermia protocol); Dr. Jeane Tsutsui (myocardial contrast echocardiography in dilated cardiomyopathy: myocardial blood flow reserve as a predictor of prognosis)

10:00 – 10:30 Refreshment Break

10:30 – 12:30 pm Session II - Ischemic Heart Disease, 3D & 4D Echo, Multimodality Imaging, Embolism, Tissue Doppler Imaging, Endocarditis, Pericarditis, Contrast Echo, TEE, Cardiac Resynchronization Therapy, Cardiac Masses, Anticoagulants, Congenital Heart Disease

Case Presentation and Discussion – Cases 17-30 Chairpersons: Drs. Nilda Espinola-Zavaleta, Muhamed Saric and Mani A. Vannan Dr. W. Patricia Ingkanisorn Bandettini (interesting case study); Dr. Marek Belohlavek (echocardiographic particle image velocimetry: An emerging approach for analysis of intracardiac flow efficiency); Dr. Reema Chugh (eyes see what the mind knows); Dr. Galal Eldin Nagib Elkilany (Libman-Sacks endocarditis presented by CNS manifestations); Dr. Nilda Espinola-Zavaleta (mitral prosthetic valve endocarditis); Dr. Navin C. Nanda (interesting 3D echo case study); Dr. R.B. Panwar (interesting case study); Dr. Gerald M. Pohost (detection of microvascular ischemia using CMR); Dr. Hanumanth K. Reddy (hemodynamic role of atria in CHF); Dr. Muhamed Saric (3D TEE appearance of mitral valve repairs and prostheses); Dr. A.K. Sarma (echo Doppler study in non alcoholic fatty liver disease); Dr. Lauren A. Simprini (multimodality imaging closes the case); Dr. Chittur Sivaram (interesting case study); Dr. Mani A. Vannan (automated 3D myocardial strain)

12:30 – 1:30 pm Lunch on your own

1:30 – 3:30 pm Session III – Congenital Heart Disease, Contrast Echo, Right Ventricle, Valvar Heart Disease, Coronary Artery Disease, Peripheral Vascular Disease, LV Diastolic Dysfunction, Stress Echo, MRI, Cardiac Trauma, Cardiac Surgery

Case Presentation and Discussion – Cases 31- 47 Chairpersons: Dr. Masood Ahmad, Julius Gardin, Ed Gill and Wilson Mathias Junior

Dr. William J. Stewart (3D TEE of complications of TAVR); Dr. Masood Ahmad (an interesting 3D presentation); Dr. Ricardo J. Benenstein (Ultrasound imaging of femoral vascular access complications: Differentiating hematoma from pseudoaneurysm and AV fistula); Dr. Robert W.W. Biederman (complementary use of echocardiography and cardiac MRI to arrive at a unifying diagnosis); Dr. M. Jay Campbell (interesting case study); Ms. Nathalie De Michelis (how to use 3D echo of the aortic root for interventions); Dr. Thor Edvardsen (The secret of echocardiography: prediction of arrhythmias in a patient after myocardial infarct); Dr. Raimund Erbel (interesting case study); Dr. Julius M. Gardin (interesting case study); Dr. Ed Gill (interesting case study); Dr. Brian Hoit (interesting case study); Dr. Leng Jiang (interesting case study); Dr. Martin G. Keane (post-traumatic heart failure in a 19 year-old gunshot victim); Dr. Smadar Kort (interesting case study); Dr. Wilson Mathias Junior (interesting case study); Dr. Takahiro Shiota (interesting case study); Mr. Rolf Baumann (new feature tracking method for myocardial function in MRI cases)

3:30 – 5:00 pm Session IV –Athletic Heart, Cardiomyopathies, Heart Failure, MRI, CT, Nuclear, Aortic Disorders, Viability, Pericardial Disease, Ischemic Heart Disease, Miscellaneous

Case Presentation and Discussion - Cases 48-59
Chairpersons: Drs. P.A.N. Chandraratna, Rachel Hughes-Doichev and Robert E. Safford

Dr. Sibel Catirli Enar (interesting case study); Dr. P.A.N. Chandraratna (advances in echocardiographic evaluation of pericardial disease); Dr. Jaroslaw Drozdz (interesting case study); Dr. Alejandro J. Forero (acute continuous murmur near aortic valve, fast echo can save lives); Dr. John Gorcsan III (interesting case study); Dr. Rachel Hughes-Doichev (interesting case study); Dr. Omer Iqbal (interesting case study); Dr. Joseph F. Maalouf (interesting case

study); Dr. Kameswari Maganti (hemodynamic stress testing: hypertrophic cardiomyopathy); Dr. Cesar Nascimento (sinus of valsalva aneurysm? echinococcosis? Pseudoaneurysm (Bantu like) of mitral-aortic intervalvular fibrosa? Rare complication: fistula from dissecting interventricular septum to left ventricle evaluated by CT, NMR in 3D TEE era); Dr. Robert E. Safford (GI bleeding and aortic stenosis); Dr. Cheuk-Man Yu (role of 3D TEE in implantation of LAA occluders)

5:00 pm Adjournment