



# Welcome Message

Dear Colleagues and Friends

It gives us great pleasure to invite your participation in Echo Singapore 2011 which is jointly organized by National University Heart Centre, National Heart Centre and other cardiac-care hospitals in Singapore and supported by the Singapore Cardiac Society. Echo Singapore aims to update physicians, surgeons, trainees, technologists and allied health professionals who share a common interest in the growing use of echocardiography and complementary imaging techniques of imaging for the diagnosis and management of cardiovascular disorders.

For 2011, the program will highlight valvular heart disease and interventional echocardiography. Expert overseas and local faculty will share their knowledge through symposia on state-of-the-art cardiovascular imaging, interactive presentations and live sessions highlighting tricks and tips in image interpretation. Cases will be liberally used to emphasize teaching points. You will also have the opportunity to

participate by submitting interesting case vignettes and high quality research for presentation. As customary, attractive prizes await the winners of these competitions!

No effort has been spared in organizing Echo Singapore 2011 and making this a rich educational experience. We look forward to your participation in this exciting event.



**Lieng H. LING** MBBS, MD, FRCP, FAMS  
Program Director  
*Associate Professor, Yong Loo Lin School of Medicine, National University of Singapore*  
*Senior Consultant, National University Heart Centre, Singapore*

# Organising Committee

## ASSOCIATE PROGRAM DIRECTORS

<b>Zee-Pin DING</b> Senior Consultant, National Heart Centre, Singapore	<b>Quek-Wei YONG</b> Senior Consultant, Tan Tock Seng Hospital
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## MEMBERS

<b>Ping CHAI</b> Senior Consultant, National University Heart Centre, Singapore	<b>Hean-Yee ONG</b> Consultant, Alexandra Hospital	<b>Raymond WONG</b> Consultant, National University Heart Centre, Singapore
<b>Ping-Ping GOH</b> Chief and Senior Consultant, Changi General Hospital	<b>Huay-Cheem TAN</b> Director & Senior Consultant, National University Heart Centre, Singapore	<b>Tiong-Cheng YEO</b> Head & Senior Consultant, National University Heart Centre, Singapore
<b>K GUNASEGARAN</b> Senior Consultant, National Heart Centre, Singapore	<b>Peter TING</b> Consultant, National Heart Centre, Singapore	<b>James Wei-Luen YIP</b> Senior Consultant, National University Heart Centre, Singapore
<b>Evelyn M. LEE</b> Senior Consultant, Tan Tock Seng Hospital	<b>Khim-Leng TONG</b> Senior Consultant, Changi General Hospital	

# International Faculty

**Joseph F MAALOUF** MD FACC  
Professor of Medicine, Mayo Clinic College of Medicine, Division of Cardiovascular Diseases, Mayo Clinic, Rochester, Minnesota, USA

**Jae-Kwan SONG** MD PhD FACC  
Professor of Medicine, University of Ulsan College of Medicine, & Director, Cardiac Imaging Center, Asan Medical Center, Seoul, South Korea

**Jagdish C MOHAN** MBBS MD DM  
Director and Chief of Cardiology, Ridge Heart Centre, New Delhi, India

**Jose Luis ZAMORANO** MBChB MD FESC  
Professor of Medicine, University Complutense, & Director, Cardiovascular Institute, University Clinic San Carlos, Madrid, Spain

**Petros NIHOYANNOPOULOS** MD FRCP FESC  
Professor of Cardiology, Hammersmith Hospital, National Heart and Lung Institute, Imperial College, London, UK

# Local Faculty

<b>Ping CHAI</b> Senior Consultant, National University Heart Centre, Singapore	<b>Carolyn Su-Ping LAM</b> Consultant, National University Heart Centre, Singapore	<b>Edgar Lik-Wu TAY</b> Consultant, National University Heart Centre, Singapore
<b>Tek-Siong CHEE</b> Consultant Cardiologist, East Shore Medical Centre	<b>Chung-Yin LEE</b> Senior Consultant, National Heart Centre, Singapore	<b>Peter TING</b> Consultant, National Heart Centre, Singapore
<b>Boon-Lock CHIA</b> Emeritus Professor, Yong Loo Lin School of Medicine, National University of Singapore	<b>Evelyn M. LEE</b> Senior Consultant, Tan Tock Seng Hospital	<b>Khim-Leng TONG</b> Senior Consultant, Changi General Hospital
<b>Paul Toon-Lim CHIAM</b> Consultant, National Heart Centre, Singapore	<b>Soo-Teik LIM</b> Head & Senior Consultant, National Heart Centre, Singapore	<b>Raymond WONG</b> Consultant, National University Heart Centre, Singapore
<b>Seng-Chye CHUAH</b> Senior Consultant, National Heart Centre, Singapore	<b>Lieng H. LING</b> Associate Professor & Senior Consultant, National University Heart Centre, Singapore	<b>Daniel Poh-Shuan YEO</b> Consultant, Tan Tock Seng Hospital
<b>Hsuan-Hung CHUANG</b> Consultant Cardiologist, Gleneagles Medical Centre	<b>Hean-Yee ONG</b> Head & Consultant, Khoo Teck Phuat Hospital	<b>Tiong-Cheng YEO</b> Head & Senior Consultant, National University Heart Centre, Singapore
<b>Zee-Pin DING</b> Senior Consultant, National Heart Centre, Singapore	<b>Kian-Keong POH</b> Associate Professor & Senior Consultant, National University Heart Centre, Singapore	<b>James Wei-Luen YIP</b> Associate Professor & Senior Consultant, National University Heart Centre, Singapore
<b>Ping-Ping GOH</b> Chief & Senior Consultant, Changi General Hospital	<b>Ju-Le TAN</b> Senior Consultant, National Heart Centre, Singapore	<b>William Chin-Ling YIP</b> Consultant Cardiologist, Gleneagles Medical Centre
<b>K GUNASEGARAN</b> Senior Consultant, National Heart Centre, Singapore		<b>Quek-Wei YONG</b> Senior Consultant, Tan Tock Seng Hospital

12 October 2011 Wednesday			
Time	Programme	Speakers	Chairpersons
0800-0830	<b>Registration</b>		
0830-0840	<b>Welcome, Introduction of Faculty and Course Preamble</b>		
0845-0905	Asymptomatic Mitral Regurgitation - Where Do We Stand?	Jose Luis ZAMORANO	
0905-0925	Conventional Echo Assessment of the LV in Chronic Mitral Regurgitation - Passe in 2011?	Evelyn M. LEE	Zee-Pin DING Boon-Lock CHIA
0925-0945	Tissue Doppler and Deformation Imaging in Mitral Regurgitation - The Gold Standard Measure of Left Ventricular Function?	Jae-Kwan SONG	
0945-1000	<b>Tea Break, Visit Exhibits</b>		
1000-1030	Valvular Aortic Stenosis: Pitfalls of Severity Assessment Using Echo-Doppler, What to Do When the Numbers Don't Add Up? Role of Systemic Arterial Hemodynamics.	Joseph MAALOUF	
1030-1050	Low Gradient Severe Aortic Stenosis with Normal Ejection Fraction: Not A Figment of the Imagination! Echo-Doppler Evaluation of Aortic Regurgitation: Many Techniques But None Reliable? Place of Quantitative Echo and CMR	Kian-Keong POH	Evelyn M. LEE Hean-Yee ONG
1050-1110		Ping CHAI	
1110-1130			
1130-1145			
1145-1200	PISA Quantitation of Mitral Regurgitation: Still The Gold Standard Technique!	Joseph MAALOUF	Boon-Lock CHIA
1200-1215	PISA in Mitral Regurgitation: Utterly Unreliable!	Lieng H. LING	
1215-1225	Rebuttal and Adjudication		
1225-1330	<b>Lunch and Visit Exhibits</b>		
1330-1350	Young Patient with Asymptomatic Pulmonary Stenosis - Assessment and Management	William C. YIP	
1350-1410	Tricuspid Regurgitation - Organic or Valvular? Severity? Masterly Inactivity or Intervene?	Jae-Kwan SONG	K. GUNASEGARAN James W. YIP
1410-1430	The Right Heart in Valvulopathy - Ignore at Your Peril!	Petros NIHOYANNOPOULOS	
1430-1445	Q&A		

1445-1505		Assessing Mitral Stenosis - Comparative Merits of Old and New Techiques. Should All Patients Have a 3D Study? Morphologic and Hemodynamic Characterization Post-Valvuloplasty	Jagdish C. MOHAN	
1505-1525	<b>Valvular Heart Miscellany</b>	Stress Echocardiography in Valvular Heart Disease - When is This Indicated? Exercise, Pharmacologic? How Should the Results Influence Decision-Making? All You Need to Know About Endocarditis in 20 Minutes - What are "High Risk" Lesions? Should I Do Serial Echos? Is TEE Always Needed? 3D Better Than 2D? Q&A	Jose Luis ZAMORANO	Seng-Chye CHUAH Tiong-Cheng YEO
1525-1545			Quek-Wei YONG	
1545-1600				
1600-1630		<b>Tea Break, Visit Exhibits</b>		
1630-1730	<b>Best New Thing in The World Competition</b>	Fascinomas from the Audience	Expert / judging panel: Joseph MAALOUF Jagdish C. MOHAN Petros NIHOYANNOPOULOS Jae-Kwan SONG Jose Luis ZAMORANO	Ping-Ping GOH Peter TING

13 October 2011 Thursday				
Time	Programme	Speakers	Chairpersons	
0800-0845	<b>Registration</b>			
0845-0900	The Left Atrium in Valve Disease - What Secrets Can It Yield?	Lieng H. LING		
0900-0915	Mycardial Fibrosis: Importance in Valvular Heart Disease and Detection with Echo and Allied Imaging Techniques	Ping CHAI	Carolyn S. LAM Daniel P. YEO	
0915-0930	Beyond Imaging: Do Blood Biomarkers Have Any Value? Can They Supplant Echo in Clinical Decision-Making? Q&A	Lieng H. LING		
0945-1000				
1000-1030	<b>Tea Break, Visit Exhibits</b>			
1030-1050	The Bicuspid Aortic Valve in 2011 - Morphology, Unique Hemodynamics, Aortopathy, How Should Knowledge of Anatomy and Physiology Influence Management?	James W. YIP	Edgar TAY, William YIP	
1050-1110	Post-repair Fallot Tetralogy with Pulmonary Regurgitation	Ju-Le TAN		
1110-1130	Congenital Valvular Exotica	Jagdish MOHAN		
1130-1145	Q&A			
1145-1200	Banish the Catheter! Cardiac Catheterization Has No Role in the Assessment of Hemodynamics in the Modern Era	Petros NIHOYANNOPOULOS	TBA	
1200-1215	Not So Fast! Cardiac Catheterization Remains Important and Indispensable!	Soo-Teik LIM		
1215-1225	Rebuttal and Adjudication			
1225-1330	<b>Lunch and Visit Exhibits</b>			
1330-1350	Multivalvular Heart Disease	Zee-Pin DING Tiong-Cheng YEO	Lieng H. LING Hsuan-Hung CHUANG	
1350-1410	Mixed Mitral Valve Disease with Giant Left Atrium	Evelyn M. LEE K. GUNASEGARAN		
1410-1430	Prosthetic Paravalvular Leak	Ping-Ping GOH Quek-Wei YONG		
1430-1450	Rheumatic Tricuspid Stenosis	Jagdish MOHAN		
1450-1510	Radiation Valve Disease	Petros NIHOYANNOPOULOS Jae-Kwan SONG	Chung-Yin LEE Quek-Wei YONG	
1510-1530	Aortic Regurgitation from Aortitis / Vasculitis			
1530-1545				
1545-1615	<b>Tea Break, Visit Exhibits</b>			
1615-1730	<b>eCHO Buffet: Non-Valvular Heart Disease Please!!!</b>	Hors d'oeuvre From The Faculty	Zee-Pin DING K. GUNASEGARAN Hean-Yee ONG Peter TING Khim-Leng TONG Raymond C. WONG	Tek-Siong CHEE Tiong-Cheng YEO

14 October 2011 Friday			
Time	Programme	Speakers	Chairpersons
0800-0845	<b>Registration</b>		
0845-0915	<b>Singapore Cardiac Society Echo Singapore Lecture</b>	3D Echocardiography in Valvular Heart Disease	Jose Luis ZAMORANO Boon-Lock CHIA
0915-0935	Multimodality imaging in TAVI: Assessment of Feasibility and Success	Jose Luis ZAMORANO	
0935-0955	Imaging in Valvular Intervention	Imaging in Percutaneous Mitral Valve Intervention - Echocardiographic Considerations and Critical Role of 3D	Joseph MAALOUF Paul T. CHIAM Kian-Keong POH
0955-1015		Percutaneous Closure of Paravalvular Leak	Edgar TAY
1015-1030		Q&A	
1030-1100	<b>Tea Break, Visit Exhibits</b>		
1100-1120	Prosthetic Valves: Old and New Valves, What's Normal and What's Not, Bio or Mechanical or Doesn't Matter?	Zee-Pin DING	
1120-1140	Aortic Prosthesis-Patient Mismatch: Definition, What to Do? Does Mitral Prosthesis-Mismatch Exist?	Joseph MAALOUF	Boon-Lock CHIA Khim-Leng TONG
1140-1210	TEE of Dysfunctional Prosthetic Valves: My Most Spectacular/Challenging Cases	Quek-Wei YONG Tiong-Cheng YEO Ping-Ping GOH	
1210-1225		Q&A	
1225-1230	<b>Closing Remarks, Award Presentation, End of Meeting</b>		

\*Programme is subject to change without prior notice from the organiser.