

## Leipzig - Germany

7-10 December 2016

# EuroEcho Imaging 2016

**20**<sup>th</sup> **Annual Meeting** of the European Association of Cardiovascular Imaging, a registered branch of the ESC, in cooperation with the German Working Group of Echocardiography.



## EuroEcho-Imaging is the annual meeting of the European Association of Cardiovascular Imaging (EACVI)



Join us to celebrate the 20th congress anniversary

#### Stay updated with the programme!



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#### Congress organiser

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#### Venue

Congress Centre Leipzig Messe-Allee I 04356 Leipzig, Germany

Discount fees are applicable to Silver and Gold EACVI members!

Join the EACVI today

Teaching courses: Follow a whole subject in the same room all day & prepare the EACVI certification exams!

#### Course on Congenital Heart Disease (CHD)

**BEETHOVEN** 

#### 09:00 - 10:30 Right ventricle in congenital heart disease

- Embryology, anatomy, pathology of normal and variations.
- Imaging of the Right ventricle: which modality is best?
- Functional assessment of the RV in congenital heart disease.
- 3D echo of the right ventricular in congenital heart disease: current status?

#### 11:00 - 12:30 Malpositions and discordant connections

- Embryology, anatomy, anatomy-pathology: AV and VA connections.
- Transposition of the great arteries: pre op and post op imaging.
- AV & VA discordance (Congenitally Corrected Transposition): optimal imaging strategy?
- Double outlet right ventricle: optimal imaging strategy?

#### 14:00 - 15:30 The atrial septum

- · Embryology & Anatomy.
- · Imaging an ASD in adults and children, something old, something new.
- Transthoracic versus Transoesophgeal Echo for ASD: indications, minimum data set and practical tips.
- Procedural imaging of ASD interventions; opening, closing and something in between.

#### Course on Cardiac Resynchronisation Therapy (CRT)

**BACH** 

#### 09:00 - 10:30 Identifying the cardiac substrate for Cardiac Resynchronisation Therapy

- How can imaging add to the ECG in CRT?
- · Left ventricular dyssynchrony in non-left bundle branch block.
- Role of cardiac magnetic resonance
- New concepts of CRT response and non-response.

#### 11:00 - 12:30 Cardiac Resynchronisation Therapy: clinical evidence and unmet clinical needs

- · Why cardiac imaging is not included in guidelines?
- How can imaging left ventricular dyssynchrony help clinically.
- Imaging to guide lead placement for CRT and other benefits.
- Unmet clinical needs: how can imaging help?

#### 14:00 - 15:30 Challenges in Cardiac Resynchronisation Therapy (CRT) and the role of imaging

- How to define response to CRT: role of imaging.
- When to do AV and VV optimisation: what is the evidence?
- Mitral regurgitation after CRT: significance and next steps.
- Can imaging assist new CRT approaches?

#### Course on three-dimensional echocardiography: from the basics to the future

**MAHLER** 

#### 09:00 - 10:30 The basics. Everything you want to know to start off on the right foot

- Physics of 3DEcho.
- · How to acquire: tips and tricks.
- · How to display: multislice, volume and surface rendering.
- · Added value of 3DEcho in quantitation.

## 11:00 - 12:30 How do you want to see your congenital heart disease patients: flat views vs. anatomical volume rendering?

- · Atrial and ventricular septal defects.
- Double outlet.
- · Univentricular hearts.
- Fhateins disease

#### 14:00 - 15:30 To the infinity... and beyond!

- Beyond physical limits: high frame rate 3D imaging.
- Beyond geometrical assumptions: quantitation of tricuspid annulus and severity of tricuspid regurgitation.
- · Beyond right ventricular volumes: shape and mechanics.
- · Beyond cardiac chamber function: intracardiac blood flow.

#### Course on Imaging and Anaestesiology

**WAGNER** 

Joint session with the European Association of Cardiothoracic Anaesthesiologists (EACTA)



#### 09:00 - 10:30 Thoracic aorta and pericardium

- · Modified TEE evaluation: effect on patient outcome
- Aortic Dissection: how helpful is TEE?
- · Monitoring of pericardiocentesis and other procedures.
- Constrictive pericarditis and surgery.

#### 11:00 - 12:30 Ventricle and more

- · Ventricular systolic function.
- · Diastolic dysfunction.
- TEE assistance for assist device.
- HOCM: an intraoperative challenge.

#### 14:00 - 15:30 Myocardial imaging and cardiac source of embolism

- Myocardial imaging: how helpful in OR setting?
- Masses and tumors.
- Atrial fibrillation (general cardioversion- new procedures).
- Endocarditis.

#### Course on Valvular Heart Disease

**BRAHMS** 

#### 09:00 - 10:30 Aortic stenosis

- · Anatomy of the aortic valve and root.
- · Pathophysiology and natural history.
- Assessment of severity.
- · Surgery and percutaneous alternatives.

#### 11:00 - 12:30 Mitral regurgitation

- · Anatomy of the mitral valve and sub-valve apparatus.
- Pathophysiology and natural history.
- Assessment of severity.
- Surgery and percutaneous alternatives.

#### 14:00 - 15:30 Infective endocarditis

- · Epidemiology and microbiology.
- Diagnosis.
- Complications.
- · Surgery and its timing.

#### Course for modern transcatheter heart valve interventions

**SCHUMANN** 

#### 09:00 - 10:30 Guiding and evaluation of interventional aortic valve therapy

- Prior to TAVI: role of echocardiography in low flow-low gradient aortic valve stenosis evaluated for TAVI.
- Periprocedural guiding by echocardiography and detection of complications.
- Diagnostic of para- and transvalvalur leackages in TVAR.
- Multivalvular diseases in TAVI patients: how to diagnose and when to treat?

#### 11:00 - 12:30 Guiding and evaluation of interventional mitral valve therapy

- Patient selection for interventional valve therapy: classification of mitral regurgitation. Morphological and functional criteria for the therapeutical decision.
- New diagnostic and therapetical approaches to the mitral valve: when to treat the annulus?
- When to treat the leaflets?
- · Controversies in grading mitral valve regurgitation severity: new guidelines and new diagnostic options.
- Follow-up after mitral tmvr: how to evaluate acute and long-term therapeutical effects in TMVR?
- How to evaluate mitral valve deformation and potential left ventricular reverse remodelling in follow-up investigations?

#### 14:00 - 15:30 Guiding and evaluation of specialities in interventional valve therapy

- Echocardiographic criteria of paravalvular leackages: size, position and treatment indication.
- Guiding during pvl procedures: how to evaluate success?
- When does a closure cause deterioration of the patient's condition?
- The tricuspid valve: new approaches to treat right heart failure due to tricuspid regurgitation: how to guide by echocardiography the interventions?
- The pulmonary valve: patient selection criteria in pulmonary stenosis and regurgitation for the interventional therapy— The role of echocardiography.

#### Course on Cardiovascular Magnetic Resonance (CMR)

**STRAUSS** 

#### 09:00 - 10:30 The basics of cardiovascular magnetic resonance

- Magnetic Resonance physics made easy.
- CMR versus echo examinations: what is similar, what is different?
- Overview of clinical CMR methods: morphology, function and more.
- · Safety of cardiovascular magnetic resonance.

#### 11:00 - 12:30 Common cardiovascular magnetic resonance indications

- · Cardiovascular magnetic resonance for heart failure assessment.
- · Cardiovascular magnetic resonance for ischemia assessment in stable IHD.
- Cardiovascular magnetic resonance in acute coronary syndromes.
- Cardiovascular magnetic resonance in cardiomyopathy.

#### 14:00 - 15:30 Advanced cardiovascular magnetic resonance indications

- TI mapping: methods and indications.
- Cardiovascular magnetic resonance in congenital heart disease.
- · Cardiovascular magnetic resonance for valve assessment.
- Tumours, pericardium and rare diseases.

## Course on all the echocardiographer needs to know on Computed Tomography & Nuclear Cardiology!

**IMAGING CAMPUS I** 

#### 09:00 - 10:30 Basics & coronary

- Principles of cardiac CT: from photons to pictures.
- Scan protocols: optimal quality, minimal dose.
- Coronary calcium score and Computed Tomography angiography: the evidence
  - Focus on stable chest pain.
- Structural heart disease: beyond the coronary arteries
  - Fundamental non-coronary cardiac disease
  - Tumors, thrombi
  - Pericardium, great vessels.

#### 11:00 - 12:30 **Advanced**

- Advanced coronary disease
  - Plaque, stents, grafts.
- Functional cardiac Computed Tomography applications
  - Ischemia (perfusion, FFRCT, TAG etc), viability, LVF.
- CT guided interventions: TAVI and beyond
  - TAVI, EP, PCI, other.
- · Integrated imaging of atherosclerosis and ischemia
  - Computational methods, plaque features (diagnosis/prognostication).

#### 14:00 - 15:30 Cases based applications

- · Cardiac CT in acute cardiovascular situations
  - Summary of evidence/literature for CT and ACS
  - Dissections/PE/trauma
  - ECMO/LVAD
  - Acute heart failure/resuscitations.
- Structural heart disease
  - Cardiomyopathies
  - Valvular, prosthetic valves, endocarditis
  - Other applications.
- Congenital conditions in kids and grown-ups.
- · Hybrid imaging.

## Wednesday 7 December 2016 - Sessions

10:30 - 11:00	How-to Session	MAHLER
How to perform a statistical analysis		
EACVI HIT (formerly Club 35)		ELCVI Hartmagen of Francesco
15:30 - 16:00	How-to Session	MAHLER
How to write an application for an EA	CVI grant – own experience	
EACVI HIT (formerly Club 35)		LACYTY Heart Reagen of Tomorrow
16:00 - 17:30	Special Event	BEETHOVEN
	Inaugural session	

## Thursday 8 December 2016 - Morning Sessions

08:30 - 10:00 Main Session BEETHOVEN

#### Multimodality imaging for stratifying prognosis of sudden cardiac death

- · In athletes.
- · In hypertrophic cardiomyopathy.
- In valvular heart disease.
- · In ischemic cardiomyopathy.

08:30 - 10:00 Clinical Imaging BACH

#### Clinical imaging in atrioventricular valve percutaneous intervention

- Critical appraisal of the EVEREST criteria for Mitraclip.
- Imaging work-up during transcatheter mitral valve intervention.
- Imaging criteria for selection of patients for transcatheter tricuspid valve repair.
- · Role of imaging during transcatheter tricuspid valve repair.

08:30 - 10:00 Symposium MAHLER

#### **Cardiac resynchronisation update**

- Update coming from the research labs.
- Update coming from the echo labs.
- Update coming from the CMR and nuclear medicine fields + AF/CRT.
- · Where are we going?

08:30 - 10:00 Symposium WAGNER

#### The role of myocardial deformation imaging in congenital heart disease

- Myocardial deformation imaging: how to do it in the clinic?
- Quantifying myocardial function and deformation patterns in congenital heart disease.
- Global & regional right ventricular function in congenital heart disease and in pulmonary hypertension.
- Prognostic value of deformation imaging in congenital heart disease.

08:30 - 10:00 Symposium BRAHMS

#### Do the right thing: Imaging the right ventricle

Joint session with the Dutch Working Group of Echocardiography



- Guidelines 2016.
- · Advance echo imaging.
- · Right heart hemodynamics: echo-cath discrepancies.
- When and why to use CMR/CT to assess the RV.

08:30 - 10:00 Symposium SCHUMANN

#### **Imaging restrictive cardiomyopathy**

Joint session with the ESC Working Group on Myocardial and Pericardial Diseases



- Echo in restrictive CM.
- Nuclear / CT in RCM.
- · Cardiovascular magnetic resonance in RCM.
- Multi-modality Imaging in RCM: new insight from the recommendation.

## Thursday 8 December 2016 - Morning Sessions

08:30 - 10:00 Teaching Course STRAUSS

#### **Basics of cardiac ultrasound**

- Essentials for ultrasound: physics, instrumentation, settings.
- The complete standard examination.
- The usual mistakes and how to avoid them.
- · Quality control in the echo-lab.

09:00 - 10:30 Imaging Campus IMAGING CAMPUS 3

#### **EACVI HIT** (formely Club 35) workshop on Transoesophageal Echocardiography (TOE) for beginning practitioners



To provide basic skills in probe manipulation to obtain standard views and knowledge on spatial anatomic relationships by 2D/3D TOE using modern training equipment



10:10 - 10:55 How-to Session MAHLER

#### How to prepare for EACVI echo certification exams

**EACVI HIT (formerly Club 35)** 



11:00 - 12:30 Main Session BEETHOVEN

#### Aorta in aortic valve disease

- · Phenotypes of aorta in AVD insights from imaging.
- Biscupid and the aorta: dangerous liaisons.
- What the surgeon needs to know about aorta before aortic valve surgery?
- What the interventional cardiology needs to know about the aorta before TAVI.

11:00 - 12:30 Clinical Imaging BACH

#### **Imaging in cardiac hypertrophy**

- · New recommandations for imaging hypertension.
- The grey zone in Athlete's heart.
- Hyperthophic cardiomyopathy.
- FÁBRY disease.

11:00 - 12:30 Special Session MAHLER

#### **Cardiac Imaging Quizz**

#### Mobile App interactive session

- Challenging cases in transthoracic echocardiography.
- · Diagnostic conundrums in transesophageal echo .
- · Solving diagnostic riddles in Cardiac CT images.
- Puzzling clinical cases of cardiac magnetic resonance.

11:00 - 12:30 Debate Session WAGNER

#### Safety of cardiac imaging: danger zone

- Cardiovascular magnetic resonance is safe. Pro.
- Cardiovascular magnetic resonance may harm. Contra.
- Decrease of irradiation: when enough is not enough. Pro.
- Decrease of irradiation: when enough is not enough. Contra.

## Thursday 8 December 2016 - Morning Sessions

II:00 - I2:30 Symposium BRAHMS

#### Mitral stenosis

Joint session with the Moroccan Working Group on Echocardiography



- · Assessment of mitral valve morphology in MS: Patient selection for Percutaneous mitral commissurotomy.
- · Quantification of MS: pitfalls and limitations.
- Stress echocardiography in MS.
- Role of echography during percutaneous mitral commissurotomy.

II:00 - I2:30 Symposium SCHUMANN

Is advanced non-invasive imaging a cost-effective approach in patients with Ischemic Heart Disease (IHD)?

Joint session with the European Association of Nuclear Medicine (EANM)



- Cost-effectiveness of advanced cardiac imaging in IHD: state of the art.
- In which patients is NUCLEAR imaging more cost-effective?
- In which patients is cardiovascular magnetic resonance more cost-effective?
- In which patients is Computed Tomography more cost-effective than stress imaging?

11:00 - 12:30 Teaching Course STRAUSS

#### **Basics of 2D cardiac assessment**

- Quantitation of left ventricular dimensions and function.
- · Quantitation of right ventricular dimensions and function.
- · Left and right atrium: size and function.
- · 4-Assessment of diastolic function.

11:00 - 12:30 Imaging Campus IMAGING CAMPUS 3

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## Thursday 8 December 2016 - Afternoon Sessions

14:00 - 15:30 Main Session BEETHOVEN

#### Multimodality imaging to optimize the management of atrial fibrillation

- Role of imaging to predict atrial fibrillation development.
- Role of imaging to guide atrial fibrillation ablation.
- · Additive role of imaging to predict thromboembolic risk.
- Multimodality imaging for assessing left atrial appendage morphology and guiding closure.

14:00 - 15:30 Clinical Imaging BACH

#### Heart failure and prosthetic valves

- · Acute heart failure in patients with prosthetic valves.
- · Chronic heart failure in patients with prosthetic valves.
- · Prosthetic Patient Mismatch near extinction.
- Perspectives in valve surgery.

14:00 - 15:30 Symposium MAHLER

#### Asymptomatic valvular heart disease

Joint session with the Korean Society of Echocardiography Mobile App interactive session



- Severe VHD: what is an asymptomatic patient?
- · What are guidelines telling us?
- What is the true place of stress echochardiography?
- · Is multimodality imaging the key?

14:00 - 15:30 Debate Session WAGNER

#### **Gladiator**

- · Secondary mitral regurgitation: repair or replacement. Pro: repair.
- Secondary mitral regurgitation: repair or replacement. Contra: Replacement.
- Pocket size is the new standard. Pro.
- Pocket size device: I just need a stethoscope. Contra.

14:00 - 15:30 Symposium BRAHMS

#### Dangerous liaison: imaging in cardio-renal disease

- · Cardiac imaging in severe renal disease: what to look for?
- Cardiac impact of haemodialysis arteriovenous fistulae
- · Role of imaging in various cardio-renal syndrome.
- Dialysis in heart failure patients: impact on cardiac imaging parameters.

14:00 - 15:30 Symposium SCHUMANN

#### New frontiers in congenital heart imaging

- · Update on fusion of multimodality imaging.
- Holography, any use for congenital heart disease.
- 3D printing: workflow to incorporate into normal practice.
- 3D rotational angiography: advanced imaging for/by interventionalist.

14:00 - 15:30 Teaching Course STRAUSS

#### Advanced echo techniques I: cardiac mechanics

- Tissue Doppler imaging and speckle tracking: general principles.
- Cardiac mechanics: rotation, torsion, twist, untwist.
- 3D strain: general principles.
- Evaluation of cardiac dyssynchrony.

## Thursday 8 December 2016 - Afternoon Sessions

14:00 - 15:30 Imaging Campus IMAGING CAMPUS 3

#### EACVI HIT (formely Club 35) workshop on Transoesophageal Echocardiography (TOE) for beginning practitioners



To provide basic skills in probe manipulation to obtain standard views and knowledge on spatial anatomic relationships by 2D/3D TOE using modern training equipment



15:40 - 16:25 How-to Session MAHLER

#### How to prepare for EACVI CMR certification exams

**EACVI HIT** (formerly Club 35)



16:00 - 17:30 Imaging Campus IMAGING CAMPUS 3

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16:30 - 18:00 Main Session BEETHOVEN

#### Update on imaging aortic stenosis

- · Left ventricular ejection fraction in aortic stenosis and beyond!
- Cardiovascular magnetic resonance in aortic stenosis. A disease of the valve and/or myocardium.
- Calcified aortic stenosis how molecular imaging may impact my practise?
- Paradoxical low flow aortic stenosis still controversial?

16:30 - 18:00 Clinical Imaging BACH

#### **Challenges in pulmonary hypertension**

- · Can imaging differentiate pre and post capillary pulmonary hypertension?
- Stress-echocardiography in pulmonary hypertension: tool or toy?
- Controversy of estimating pulmonary arterial pressure by echocardiography.
- · Imaging and pulmonary hypertension treatment.

16:30 - 18:00 Symposium MAHLER

#### That's right

Joint session with the Canadian Society of Echocardiography (CSE)



- · Arrhythmogenic right ventricular dysplasia.
- Right heart in athletes.
- Right ventricular in patients with right heart surgery.
- Right ventricular in candidates with left ventricular assist device implantation.

16:30 - 18:00 Debate Session WAGNER

#### Ischemic heart disease: single or multimodality imaging

- In patients with known or suspected coronary artery disease, I only need the anatomy: computed tomography.
- In patients with known or suspected coronary artery disease, I prefer functional imaging.
- For assessment of myocardial viability I only need LGE-MRI.
- For assessment of myocardial viability I only need stress echocardiography.

## Thursday 8 December 2016 - Afternoon Sessions

16:30 - 18:00 Symposium BRAHMS

#### What's new in industry?

Industry representative will present highlights of their current programme in CVI as well as any products in the pipeline. Each presentations will be followed by a panel discussion. We encourage questions from the audience.

16:30 - 18:00 Symposium SCHUMANN

#### Advanced imaging in advanced heart failure

#### **EACVI HIT (formerly Club 35)**

- · Cardiac Magnetic Resonance. When could we use it?
- Echocardiography in the heart transplanted patient.
- Right ventricular evaluation: a cross road for the LVAD eligibility.
- Transthoracic 3D-echo for anatomical valvular assessment.



#### Advanced echo techniques II: miscellaneous

- Stress echocardiography in valve disease.
- Contrast echocardiography: current applications.
- 3D intra-cardiac echocardiography.
- Echo guiding percutaneous procedures.



## Friday 9 December 2016 - Morning Sessions

08:30 - 10:00 Main Session BEETHOVEN

#### **Imaging in aortic regurgitation**

- MMI Workflow for the quantification of AR.
- Aortic regurgitation in adult congenital heart disease.
- Imaging for the management of paravalvular aortic regurgitation.
- MMI of the left ventricule in aortic regurgitation.

08:30 - 10:00 Clinical Imaging BACH

#### Clinical imaging in heart failure

- HFpEF and HFrEF, 2 opposite entities or a continuum?
- · Myocardial fibrosis.
- · Importance of geometry in heart failure.
- · Imaging and new treatments for heart failure.

08:30 - 10:00 Symposium MAHLER

#### Don't we need an additional plane?

Joint session with the Polish Cardiac Society Mobile App interactive session



- Why we need 3D in assessing ventricles.
- · 3D in mitral valve.
- 3D in aortic valve.
- 3D in right-sided heart valves.

08:30 - 10:00 Symposium WAGNER

#### The best of Heart Imager of Tomorrow 2015 (HIT)

**EACVI HIT (formerly Club 35)** 



- 3D echocardiography and strain.
- Cardiac magnetic resonance.
- · Stress imaging.
- · Imaging in critical care.

08:30 - 10:00 Symposium BRAHMS

#### Time to revalidate patients after valve intervention

Joint session with the European Association for Cardiovascular Prevention & Rehabilitation (EACPR)



- · Imaging before and after cardiac rehabilitation in which mitralclip patients?
- Imaging before and after cardiac rehabilitation in which TAVI patients?
- Effect of cardiac rehabilitation on systolic function after valve surgery?
- State of the art in imaging for cardiac rehabilitation after valve intervention.

08:30 - 10:00 Symposium SCHUMANN

#### Stress imaging in congenital heart disease

Joint session with the European Association of Cardiovascular Imaging (EACVI) and the American Society of Echocardiography (ASE)





- How to stress the congenitally malformed heart? An overview of different modalities.
- Stressing the left ventricle.
- Stressing the right ventricle.
- Stressing the single ventricle.

## Friday 9 December 2016 - Morning Sessions

08:30 - 10:00 Teaching Course STRAUSS

#### Advanced echo technique I: 3D echo

- Assessment of left ventricular shape and function.
- Assessment of right ventricular shape and function.
- The left atrium in 3D.
- Valve morphology: normal and pathological.

09:00 - 10:30 Imaging Campus IMAGING CAMPUS 3

#### **EACVI HIT** (formely Club 35) workshop on Transoesophageal Echocardiography (TOE) for beginning practitioners



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10:10 - 10:55 How-to Session MAHLER

#### How to write a scientific paper?

**EACVI HIT (formerly Club 35)** 



II:00 - I2:30 Main Session BEETHOVEN

#### Should I stay or should I go: Imaging for cardiac resynchronisation therapy candidates

- Role of echocardiography in Cardiac Resynchronisation Therapy: from guidelines to real word.
- Optimizing benefits from Cardiac Resynchronisation Therapy: lead positioning in the era of multimodality imaging.
- Novel tools to evaluate left ventricular dyssynchrony.
- What future for myocardial imaging in Cardiac Resynchronisation Therapy.

11:00 - 12:30 Clinical Imaging BACH

#### Imaging in ischemic heart disease

- Imaging myocardial bridging: how to handle?
- Imaging the vulnerable plaque: the Holy Grail?
- Place of imaging in functional testing for in ischemic heart disease 2016.
- Imaging inflammation and cardiac remodelling.

11:00 - 12:30 Special Session MAHLER

#### Live session - Vertigo

Live session from the Heart Center Leipzig. Joint session with the European Heart Rhythm Association (EHRA)



- · Imaging a patient with tachycardia.
- · Imaging a patient with syncope.
- Imaging a patient with bradycardia.
- Imaging a patient with bundle branch block.

11:00 - 12:30 Symposium WAGNER

#### 3D inside the cath lab

Joint session with the European Association of Cardiovascular Imaging (EACVI) and the American Society of Echocardiography (ASE)





- A must in TAVI.
- · A must in mitral interventions.
- A must in LAA closure.
- · A must in leak closure.

## Friday 9 December 2016 - Morning Sessions

II:00 - I2:30 Clinical Imaging BRAHMS

#### **Challenges in cardiac oncology**

#### Clinical Pathway

- · Imaging in cardiac oncology.
- Asymptomatic patient with inconsistencies between left ventricular ejection fraction and deformation imaging parameters post chemotherapy.
- Symptomatic patient with inconsistencies between left ventricular ejection fraction and deformation imaging parameters post chemotherapy.
- · Valvular heart disease in an oncologic patient.

II:00 - 12:30 Debate Session SCHUMANN

#### Jekyll and Mr Hyde

- · Focus is enough. Pro.
- · Focus is not enough. Contra.
- Early intervention in asymptomatic primary MR Go for it. Pro.
- Early intervention in asymptomatic primary MR I prefer to wait. Contra.

11:00 - 12:30 Teaching Course STRAUSS

#### Valvular Heart Disease I

- Grading aortic stenosis: tips and tricks.
- Mitral regurgitation assessment.
- · 3-Aortic regurgitation assessment.
- · Grading mitral stenosis.

II:00 - I2:30 Imaging Campus IMAGING CAMPUS 3

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## Friday 9 December 2016 - Afternoon Sessions

14:00 - 15:30 Main Session BEETHOVEN

#### Place of imaging in aortic valve intervention

Joint session with the ESC Working Group on Valvular Heart Disease

Valvular Heart
Disease
ESC Working Group

- AV interventional: the place of imaging in the guidelines.
- Role of the imager in the heart team?
- Not every prosthesis are equal: imaging still a role in aortic valve surgery.
- Imaging in complications after AV intervention.

14:00 - 15:30 Clinical Imaging BACH

#### Imaging in atrial fibrillation: from diagnosis to treatment

- · VHD in atrial fibrillation.
- · Ventricular function in atrial fibrillation
- Is CHAD2 VASC2 enough or do I need imaging.
- · Cardiac imaging in the era of DOACS (Direct Oral Anticoagulant's).

14:00 - 15:30 Symposium MAHLER

#### Singing in the strain

Joint session with the Bulgarian Working Group of Echocardiography



- Basics in myocardial deformation.
- 3D Strain: ready for prime time.
- · Strain in cardiac genetic disease.
- · Usefulness of strain when left ventricular ejection fraction is preserved.

14:00 - 15:30 Special Session WAGNER

#### The research in imaging in the world - EuroEcho-Imaging Lecture

The young investigator awardees 2016 from US (American Society of Cardiology-ASE), Japan (Japaneese Society of Cardiology-JSE) and Asia (Asian Pacific Assossiation of Echocardiopgraphy-AAE) will present their winning research.

14:00 - 15:30 Symposium BRAHMS

#### The physiologist corner: what you need to know to interpret cardiac imaging

- Pressure volume loops.
- The dynamic nature of mitral regurgitation.
- · Flow propagation.
- Right ventricular/Left ventricular interaction: how does it affect function and measurements?

14:00 - 15:30 Symposium SCHUMANN

#### Aortic coarctation: multimodality assessment and follow-up

- Imaging before and after coarctation intervention and repair.
- How to follow the adult patient after CoA repair in clinical practice.
- Cardiac mechanics after CoA repair.
- Stress imaging in coarctation.

14:00 - 15:30 Teaching Course STRAUSS

#### Valvular Heart Disease 2

- Prosthesis valve dysfunction.
- Percutaneous prosthesis valve dysfunction: paravalvular leak and hemodynamic deterioration.
- · Assesment of endocarditis: what are the guidelines telling us?
- · Right-sided valve disease assessment.

## Friday 9 December 2016 - Afternoon Sessions

14:00 - 15:30 Imaging Campus IMAGING CAMPUS 3

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15:40 - 16:25 How-to Session MAHLER

#### How to write a meeting abstract?

**EACVI HIT** (formerly Club 35)



16:00 - 17:30 Imaging Campus IMAGING CAMPUS 3

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To provide basic skills in probe manipulation to obtain standard views and knowledge on spatial anatomic relationships by 2D/3D TOE using modern training equipment



16:30 - 18:00 Main Session BEETHOVEN

#### The walking dead: role of imaging after Sudden Cardiac Death (SCD)

- Early role of imaging after sudden cardiac death in ischemic disease, role of MMI.
- Early role of imaging after sudden cardiac death in non ischemic disease.
- · Role of imaging in the critically ill after sudden cardiac death.
- The role of imaging late after sudden cardiac death: can imaging help in secondary prevention.

16:30 - 18:00 Clinical Imaging BACH

#### Clinical imaging in hypertension

- Recommendation on the use of echocardiography in adult hypertension.
- The traditional echocardiography assessment of hypertensive heart.
- How to integrate longitudinal strain in the assessment of hypertension.
- Imaging the effect of anti hypertensive treatment on the heart.

16:30 - 18:00 Symposium MAHLER

#### Citizen Strain

Joint session with the Japanese Society of Echocardiography (JSE)



- · Tips and tricks.
- · Pericardial disease.
- Cardiac oncology.
- Restrictive CM.

16:30 - 18:00 Symposium WAGNER

#### The fantastic 4: the 4 best papers of my journals in 2016

- · Circulation: cardiovascular imaging.
- Journal of the American College of Cardiovascular Imaging (JACC).
- Journal of the American Society of Echocardiography (JASE).
- European Heart Journal Cardiovascular Imaging (EHJ CVI).

## Friday 9 December 2016 - Afternoon Sessions

16:30 - 18:00 Symposium BRAHMS

#### Tea for two in the operating room

- Mitral valve repair: The Imager expertise.
- Mitral valve repair: The Surgeon expertise.
- Aortic valve repair: The Imager expertise.
- Aortic valve repair: The Surgeon expertise.
- Panel discussion.

16:30 - 18:00 Symposium SCHUMANN

#### Spot the problem - Imager vs interventionalist

#### **EACVI HIT (formerly Club 35)**



- Tips and tricks for the imager during MitraClip procedure: repair with a click and a plug.
- TAVI imaging: plan correctly and prevent the catastrophe.
- The role of the tricuspid valve in TAVI and MitraClip.
- CT and CMR to guide interventions.

16:30 - 18:00 Teaching Course STRAUSS

#### Transposition of the the great arteries: a multimodality approach

- Pre surgical evaluation
- · Cardiac mechanics after the atrial switch
- Imaging for complications after the arterial switch and atrial switch operation
- · Cardiac mechanics after the arterial switch operation

18:00 - 19:00 Special Session BEETHOVEN

Echo@Jeopardy

## Saturday 10 December 2016 - Morning Sessions

08:30 - 10:00 Clinical Imaging MAHLER

#### Difficult cases in valvular intervention

Clinical Pathways

Mobile App interactive session



- Role of imaging in percutaneous intervention.
- Difficult mitraClip.
- Challenging TAVI.
- · Valve in valve/ring.

08:30 - 10:00 Symposium WAGNER

#### **Imaging in unclassified cardiomyopathies**

Joint session with ECOSIAC

ECOSIAC

- · Left ventricular non-compaction.
- False idiopathic cardiomyopathies.
- · Stress cardiomyopathies.
- · Other unclassified.

08:30 - 10:00 Symposium BRAHMS

#### A career in multimodality imaging

**EACVI HIT (formerly Club 35)** 



- How to thrive in echocardiography and keep up with the latest techniques: the view of a physiologist.
- Interventional imaging: a new subspecialty?
- CMR, CT and nuclear training: how long and how much?
- · Research opportunities for the young community.

08:30 - 10:00 Teaching Course SCHUMANN

#### Disease of the aorta

- Acute aortic syndrome: echocardiography.
- Acute aortic syndrome: CT/CMR.
- Thoracic aortic dilatation and aneurysm: TEE.
- Thoracic aortic dilatation and aneurysm: CT/CMR.

08:30 - 10:00 Symposium STRAUSS

#### Multimodality cardiac imaging trials in coronary artery disease: viewpoints "across the Ocean"

Joint session with the American Society of Nuclear Cardiology (ASNC)



- Imaging and diagnosis: could we "EVINCI" the appropriate modality?
- Imaging and outcome: do we need "COURAGE" to keep "PROMISE"?
- · Emerging imaging: the "CE-MARK" ways.
- Is viability imaging still "viable" after "STICH"?

10:10 - 10:55 How-to Session MAHLER

#### How to prepare a scientific lecture? (how to be a good speaker?)

**EACVI HIT (formerly Club 35)** 



## Saturday 10 December 2016 - Morning Sessions

11:00 - 12:30 Special Session MAHLER

#### EuroEcho-Imaging 2016 highlights

The best abstract research of EuroEcho-Imaging 2016 summarized in one session!

- · Heart failure.
- New technologies.
- Valve.
- · Congenital heart disease.
- · Computed tomography.
- · Cardiovascular magnetic resonnance.

#### The forgotten regurgitation

- Tips and tricks in tricuspid valve evaluation: from M-mode to 3D.
- Assessment of tricuspid regurgitation before left-sided valve intervention.
- How to assess tricuspid prosthesis and ring: the role of multi-imaging modelities.
- Tricuspid regurgitation after left-sided valve interevention.

11:00 - 12:30 Symposium BRAHMS

#### **Pericardial disease**

Joint session with the Iranian Society of Echocardiography (ISE)



- What is new in Constrictive pericarditis.
- Deformation imaging.
- Tamponade.
- CMR in pericardial disease.

II:00 - I2:30 Teaching Course SCHUMANN

#### **Cardiac Masses and source of emboli**

- Cardiac tumor.
- Thromboembolism risk assessment in atrial fribrillation.
- · Intra-cardiac thrombus.
- Role of contrast echo and cardiovascular magnetic resonance.

## EUROPEAN ASSOCIATION OF CARDIOVASCULAR IMAGING (EACVI)

## **Membership Programme**

# PICK your level ENJOY exclusive benefits



<sup>\*</sup> For members from ESC countries





