Final Programme
as of 20 November 2017

Lisbon - Portugal
6–9 December 2017

www.escardio.org/EACVI
Welcome Letter

Welcome to EuroEcho-Imaging 2017 in Lisbon, Portugal! EuroEcho-Imaging is the flagship of the European Association of Cardiovascular Imaging (EACVI) and the world’s largest cardiovascular imaging congress.

This year’s main themes are imaging in heart failure and interventional imaging.

EuroEcho-Imaging will create an exciting forum, in which both clinicians and scientists can present and discuss the most up-to-date research and clinical findings on the broader spectrum of echocardiography alongside with the other cardiovascular imaging modalities. Cardiologists, physicians from other specialties and imagers who use these cardiac and vascular imaging techniques will interact to discuss how to ideally use all the capabilities offered by these techniques and how to further develop them in the near future.

An educational track will run throughout the congress, featuring several specifically designed courses and sessions. Young cardiologists and researchers will be stimulated and supported through the three Young Investigator Award competitions (clinical, basic science, clinical case). Also, dedicated initiatives will reward the best original research.

However, EuroEcho-Imaging is more than just education and science. It is also a fantastic opportunity to meet the greatest experts in cardiovascular imaging in the world, to exchange ideas and projects with colleagues who share the same clinical or scientific interest coming from all over the world.

Thank you for being with us in Lisbon, we look forward to seeing you in the coming days.

Prof. Bogdan A. Popescu  
EACVI President

Prof. Erwan DONAL  
EuroEcho-Imaging Scientific Chair
EACVI SILVER MEMBERSHIP
for 100€
only during the congress*

*Instead of 156€ for the 2018 membership. Restricted to paying EuroEcho-Imaging 2017 delegates. Not applicable to day ticket holders.

...see you at
the EACVI stand
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EuroEcho-Imaging 2017 Committees

Executive Board Members

**EACVI President 2016 - 2018**  
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(Bucharest, RO)

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(Oslo, NO)

**EACVI Past-President**  
Prof. Gilbert Habib, FESC  
(Marseille, FR)

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**Chair - Cardiac CT & Nuclear Section**  
Gaemperli O. (CH)

**Scientific Programme Director Cardiac CT & Nuclear Section**  
Gimelli A. (IT)
ACKNOWLEDGEMENT
The EACVI Scientific Programme Committee takes the opportunity to thank all volunteers involved in the development of this year’s edition of EuroEcho-Imaging congress: committee members, abstract reviewers, international partners, faculty and congress reporters.
# Congress Timetable

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AS: Abstract Session
CB: Coffee Break
Download EuroEcho-Imaging 2017 Mobile App

SEARCH by Keywords

CREATE your personal programme

ACCESS maps, speakers

VOTE & ask questions

Search for ‘EuroEcho2017’ in App Store® / Google Play
Congress Resources

Ensure you make the most of your congress experience with the whole range of resources you can use before, during and after the congress.

SP&P

www.escardio.org/EACVI

Get the most up-to-date information with the Scientific Programme & Planner!

Before the congress: Prepare your attendance by creating your personalised programme and review abstracts online (available for consultation one week before the congress).

During the congress: Search for sessions by topics or presenters and access any scientific content 24 hours after presentation time.

Computer stations are available at the internet corner in the Poster Area to consult the Scientific Programme & Planner.

Missed a session?
After the congress, resources will be available to Silver and Gold EACVI Members.

To access exclusive benefits and consult slides, screen casts and abstracts all year long, make sure you become a Silver or Gold EACVI member as these are exclusive benefits. To become a member, come to the EACVI stand and ask all about it.

Benefit from a special offer on the EACVI Silver membership level, exclusive to EuroEcho-Imaging 2017 paying delegates from 6 to 9 December 2017.

All scientific content at your fingertips in the e-Library stations located in the Poster Area

All selected abstracts and electronic posters are available for consultation and all slide presentations will be available 24 hours after presentation time.
Pick up your free daily Congress News
Read about the scientific highlights of the day, find exclusive scientific articles and other daily news.

Congress Reports
For unbiased scientific opinions on key sessions and presentations, read the EuroEcho-Imaging 2017 Congress Reports and discover the views of some of Europe’s most well-know experts. These reports are prepared on-site by our voluntary reporters and published online every day on www.escardio.org/EACVI

Practical Information

Internet connection
Free wifi is available at the congress centre. However please note that connectivity is subject to the volume of users.
Wifi name: eei-congress

In the poster area
Charging stations for your mobile
e-Library to consult slides and abstracts
Internet corner to browse your scientific programme
Mobile app stations to access the “EuroEcho2017” Mobile App

Certificates
For attendance - available from the registration desks as of Friday 8 December
For presentation - available for abstract presenters at the poster assistance desk in the poster area

Continuing medical education (CME)
EuroEcho-Imaging 2017 is currently under review by the European Accreditation Council for Continuing Medical Education (EACCME) to provide the following CME activity for medical specialists.
The EACCME is an institution of the European Union of Medical Specialists (UEMS), www.uems.net.

Language
The official language during the congress is English.
No translation is available.
DON’T MISS

Inaugural Session
Wednesday 6 December, 16:00 - 17:30, room Lisboa
Featuring the Edler lecture by Professor Thomas H. Marwick on “Recognizing the elephant in the room. Quality control in imaging”. Join us afterwards at the EACVI stand for the Networking Reception.

EACVI General Assembly
Friday 8 December, 10:00-11:00 room Guardia
Updates on the latest achievements and future developments of the association. All EACVI members are welcome to attend.

EACVI HIT Cocktail (Heart Imagers of Tomorrow)
Friday 8 December from 19:00, opposite the EACVI Members’ Lounge
Silver and Gold EACVI Members under 38 years old or under 40 years old in training are invited to exchange and meet the EACVI Board members.
Pre-Arranged Programme

Dedicated Sessions for the Young Community
Recommended by the EACVI HIT (Heart Imagers of Tomorrow)

The EACVI Heart Imagers of Tomorrow committee has carefully selected sessions that are not to be missed for the young community, such as:

- **How To Sessions**
  Sessions where experts share their tips on practical topics for young doctors such as “How to write a good abstract”...
  *Every day during the coffee breaks in room Porto*

- **The best of 2017 HIT**
  A session coordinated by the EACVI young researchers who will present their extensive reviews on what has been presented in 2017 in imaging.
  *Friday 8 December, 08:30 - 10:00, room Evora*

- **Workshop on Transoesophageal Echocardiography (TOE) by EACVI HIT:**
  Sessions will run 2 times per day on Wednesday and 4 times per day on Thursday and Friday in the TOE Room.

- **“Critical care echocardiography”**
  *Thursday 7 December: 11:00-12:30, room Guarda*

- **“Hot topics in valvular heart disease”**
  *Thursday 7 December: 16:30-18:00, room Evora*

**EACVI HIT recommended sessions**

- **HIT the Case!**
  10 Young clinicians will present their cases during this Clinical case session.

Joint Sessions

To address the multi-disciplinary approach in cardiovascular imaging, sessions are organised in collaboration with:

**ESC Communities:**
- Heart Failure Association (HFA of the ESC)

**EACVI National and Affiliated Societies:**
- American Society of Echocardiography (ASE)
- Asia-Pacific Association of Echocardiography (AAE)
- Asociación de Ecocardiografía e Imagen Cardiovascular de la Sociedad Interamericana de Cardiología (ECOSIAC)
- Canadian Society of Echocardiography (CSE)
- Cardiovascular Imaging Department of the Brazilian Society of Cardiology
- Indian Academy of Echocardiography (IAE)
- Italian Society of Echocardiography and Cardiovascular Imaging (SIECVI)
- Korean Society of Echocardiography(KSE)
- Nordic Working Group on Echocardiography
- Saudi Heart Association (SHA)
- Turkish Working Group of Cardiac Imaging
- Working Group of Echocardiography of the German Cardiac Society
- Working Group of Echocardiography of the Hellenic Cardiological Society
- Working Group on Echocardiography and other Imaging modalities of the Romanian Society of Cardiology
Hightech Corner Sessions

Session focusing on the most up-to-date technology
Friday and Saturday, 10:00 - 11:00, room Agora

Echo@Jeopardy

Friday 8 December, 18:00 - 19:00, room Lisboa
We are turning the popular Jeopardy game into a cardiovascular imaging challenge

EuroEcho-Imaging 2017 Highlights

Saturday 9 December, 11:00-12:30, room Porto
Experts will summarise the best findings of the congress and provide essential take-home messages

Cardiac Imaging Quiz Sessions

Thursday and Friday, 10:00 to 11:00, room Lisboa
Discussions around practical cases by the experts who will call upon the audience in regards to the management of the case. The audience has the opportunity to vote and ask questions directly via the EuroEcho-Imaging 2017 Mobile Application during this highly interactive session

Abstracts & Clinical Cases Programme

Young Investigator Award (YIA) Sessions

Thursday 7 December, Agora
- 10:00 - 11:00: Basic Science
- 15:30 - 16:30: Clinical Science - The Roelandt’s Young Investigator Award

Friday 8 December, Evora
- 14:00 - 15:30: The research in imaging in the world - EuroEcho-Imaging Lecture
  Featuring the EuroEcho Lecture by Professo Philippe Pibarot on: “Why and how cardiac imaging has revolutionized the management of aortic stenosis”
  The young investigator awardees 2017 from USA (American Society of Echocardiography-ASE) and Japan (Japanese Society of Echocardiography-JSE) will present their winning research

Rapid Fire Abstracts

Wednesday to Saturday in the Agora
Fast-paced and interactive oral presentations on research highlights, followed by discussions animated by two experts chairing the session!

Clinical Case Sessions

Sharing challenging clinical cases to learn and exchange!
EuroEcho-Imaging congress is only accessible to certified healthcare professionals.

Venue

Centro de Congressos de Lisbon
Praça de Indústrias
1300-307 Lisbon, PT
Tel.: +351 21 892 1400

www.lisbonvenues.pt/centro-de-congressos-de-lisboa
Industry at EuroEcho-Imaging 2017

The fight against cardiovascular disease is a shared mission. Our industry partners offer a rich educational programme to delegates throughout the congress. Discover the wide variety of activities from educational sessions to stand activities.

Exhibition

The exhibition is an integral part of the congress. The exhibition provides delegates with the opportunity to exchange with key industry experts on critical areas of development and research in cardiovascular products and therapies. The exhibition will be a central hub for scientific discussion and exchange during the congress.

EXHIBITION FLOOR PLAN
AT LEVEL 0

EXHIBITION OPENING HOURS

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>Wednesday 6 December</td>
<td>09:00 - 17:30</td>
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<tr>
<td>Thursday 7 December</td>
<td>08:30 - 17:30</td>
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<td>Friday 8 December</td>
<td>08:30 - 17:30</td>
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Acknowledgements

Exhibitors

<table>
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<tr>
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<tr>
<td>3D Systems Simbionix</td>
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<td>Bioscientifica</td>
<td>D400</td>
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<td>HeartWorks by MedaPhor Ltd</td>
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<tr>
<td>Wisepress Online Bookshop Ltd</td>
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Satellite Symposia

Delegates are cordially invited to attend a series of Satellite Symposia included in the EuroEcho-Imaging 2017 Scientific Programme. These sessions will offer pertinent data on the latest scientific development in cardiovascular imaging from the industry.

For further information, please refer to the Scientific Programme daily sections, the Scientific Programme & Planner and the Mobile App.

Imaging Campus

The Imaging Campus offers delegates a unique opportunity for practical training and hands-on learning from industry experts in an intimate setting, allowing them to address specific issues essential to your daily practice.

Central Registration Management Desk onsite. Sign up now at the dedicated desk located in front of the Imaging Campus.

Seats are limited!

For further information, please refer to the Scientific Programme daily sections, the Scientific Programme & Planner and the Mobile App.

- Abbott/Philips
- Philips
- GE Healthcare
- Tomtec

Sponsorship

The ESC gratefully acknowledges the following organizations which have contributed to the success of EuroEcho-Imaging 2017 via educational grant, support of delegate services materials and other sponsorship opportunities.
Overview
by Session
Clinical Cases Sessions
- Congenital heart disease from infant to adult
- Diagnosis and management of cardiomyopathies: overcoming the challenges
- HIT the case!
- The image you never saw but it exists!

Clinical Seminars
- Advances in ischemic heart disease: read with the experts
- Advances in the cath lab I
- Advances in the cath lab II
- Advances in the EP lab I. When the cardiac imager meets the electrophysiologist: focus on atrial fibrillation
- Advances in the EP lab II. When the cardiac imager meets the electrophysiologist: focus on ventricular arrhythmias and dysfunction
- Challenges in pulmonary hypertension: imaging matters!
- Heart failure: imaging matters
- Imaging native and prosthetic valves: become a master
- LV hypertrophy: a disease of many faces

Debate Sessions
- Congenital heart disease - Imaging for the 21st century
- Dr Jeckyll and Mr Hyde
- Imaging Heart failure: bloody session
- Is advanced assessment of LV function ready for prime time?
- Tea for two in the operating theater

HIT Recommended Sessions
- HIT Poster session 1
- HIT Poster session 2
- HIT Poster session 3

HIT Moderated Posters
- Best moderated posters of HIT community

HIT Poster Sessions
- HIT Poster session 1
- HIT Poster session 2
- HIT Poster session 3

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HIT Recommended Sessions
- Critical care echocardiography
- HIT the case!
- Hot topics in valvular heart disease
- How to analyze a CMR exam - Tips for beginners
- How to analyze nuclear cardiology data - tips for beginners
- How to design and write a good scientific research study
- How to prepare EACVI echo certification exam
- How to prepare for EACVI CMR certification exam
- How to stay updated on cardiovascular imaging
- How to write a good abstract
- The best of 2017 HIT: multimodality predictors of clinical hot points
- Workshop on TOE - Focus on ASD closure
- Workshop on TOE - Focus on critical patient in CCU
- Workshop on TOE - Focus on heart valve disease
- Workshop on TOE - Focus on Mitraclip
- Workshop on TOE - Focus on prosthetic valves

Imaging Campus Sessions
- Automatic 3D left heart volumetry, a true differentiator in LV and LA quantification. Sponsored By Philips
- Basic to advanced image analysis and quantification in echocardiography including speckle-tracking - Sponsored by TOMTEC IMAGING SYSTEMS
- Cardiac chamber quantification - According to the guidelines sponsored by TOMTEC IMAGING SYSTEMS
Imaging Campus Sessions (continued)
- Evolution and current status of 3D TEE diagnosis illustrated by clinical cases. Sponsored by Philips
- Imaging of cardiac anatomy - Sponsored by the EACVI
- Myocardial strain imaging for the early detection of myocardial damage in patients with cardiomyopathy, myocarditis and oncological diseases - Sponsored by GE Healthcare
- Quantitative analysis of Right Ventricular geometry and function - Sponsored by GE Healthcare
- The gold standard for TEE assessment before, during, and after LAA occlusion Joint Session Sponsored by Abbott - Philips
- Understanding the Echo guidance for Percutaneous Mitral Valve Repair patients screening and procedure - Joint Session Sponsored by Abbott - Philips

Main Sessions
- Cardiac resynchronization therapy: how to get the best out the device
- Contemporary use of cardiac imaging in heart failure
- Heart failure and ischemia
- How to use cardiac imaging to discover early heart failure in cardiomyopathies?
- Imaging and Transcatheter Aortic Valve Replacement (TAVR)
- Imaging in the electrophysiology lab
- Intervention on the atrio ventricular valves
- The invasive validation of left ventricular filling pressures

Mobile App Interactive Sessions
- Cardiac Imaging Quiz 1 - Solving great mysteries in cardiac imaging
- Cardiac Imaging Quiz 2 - Challenging cases in Cardiac Imaging
- Cardiac resynchronization therapy: how to get the best out the device
- Heart failure and ischemia
- How to use cardiac imaging to discover early heart failure in cardiomyopathies?
- The invasive validation of left ventricular filling pressures

Meet the Experts
- Extend the experience of two important past EACVI webinars

Moderated Posters
- Best moderated posters of HIT community
- Clinical cases moderated - A mass or a mess, let’s have a look!
- Clinical cases moderated - Congenital heart disease
- Clinical cases moderated - Myocardial disease: see that case at least once!
- Clinical cases moderated - The nightmare of aortic syndromes: be prepared to survive
- Clinical cases moderated - Waiting for Euro-Endo results: endocarditis clinical cases
- Congenital heart disease
- Exercise - the bad, the ugly or the good guy
- Mitral regurgitation in the era of edge-to-edge percutaneous procedure
- New secrets revealed about cardiomyopathies
- Pathophysiological insights for diagnosis and prognosis using advanced cardiovascular magnetic resonance imaging
- Present and future of Nuclear Cardiology/Computed Tomography imaging for clinical purpose

Oral Abstract Sessions
- Young Investigator Award session - Basic Science
- Young Investigator Award session - Clinical Science - The Roelandt’s Young Investigator Award

Poster Sessions
- Clinical Case Poster session 1
- Clinical Case Poster session 2
- Clinical Case Poster session 3
- Clinical Case Poster session 4
- Clinical Case Poster session 5
Poster Sessions (continued)
- Clinical Case Poster session 6
- Poster session 1
- Poster session 2
- Poster session 3
- Poster session 4
- Poster session 5
- Poster session 6

Rapid Fire Abstract Sessions
- Assessment of LV performance
- Congenital Heart Disease
- New insight in aortic stenosis
- New insights in diastology
- New methods in the echocardiographic assessment of cardiac function
- The additional role of Nuclear Cardiology/Computed Tomography imaging in difficult patients
- The prognostic value from echocardiography
- Up-to-date research on left ventricular function

Satellite Symposia
- Clinical value of advanced ultrasound cardiac analysis for the daily routine - Sponsored by Toshiba Medical Systems
- Complementing imaging for better management across the CV continuum - Sponsored by SERVIER
- Contrast echocardiography: clinical guidelines and evidences - Sponsored by Bracco
- How can echo and cardiac fusion imaging help cardiologists even more? - Sponsored by Philips Healthcare
- The future of echo is measurable: how to achieve over 200+ automated measurement in a daily practice - Sponsored by Siemens Healthineers

Special Events
- EACVI General Assembly
- Inaugural session

Special Sessions
- Cardiac Imaging Quiz 1 - Solving great mysteries in cardiac imaging
- Cardiac Imaging Quiz 2 - Challenging cases in Cardiac Imaging
- Echo@Jeopardy
- EuroEcho-Imaging 2017 highlights
- Hightech corner session 1
- Hightech corner session 2
- The research in imaging in the world - EuroEcho-Imaging Lecture

Symposium
- Advances in the non-invasive assessment of cardiac mechanics
- Aortic regurgitation and the aorta
- Aortopathy
- Cardiac CT Secrets
- Cardiomyopathies and heart failure phenotypes
- Cardiotoxicity in oncology; not only heart failure
- Clinical use of 2D Speckle Tracking - Hopes and Facts
- Computing in Echocardiography and multimodality imaging
- Congenital heart disease: heart failure and transplantation
- Do you understand CRT?
- Echocardiography in the intensive care unit. From acute heart failure to cardiogenic shock
- Echocardiography to guide interventions - case-based session
- Focus on FOCUS echo
- Functional mitral regurgitation: Update 2017
- HIT HOT session (Heart Imagers of Tomorrow - Heart failure specialists Of Tomorrow)
Symposium (continued)

• Imaging for intervention in single ventricle patients
• Imaging predictors for outcome
• Methods and value of cardiotoxicity assessment in oncologic disease
• Mitral regurgitation - how to approach?
• Multi-modality seminar: coronary abnormalities - Congenital and acquired
• New horizons in congenital heart imaging
• Pericardial Imaging state of mind
• Prosthetic valve endocarditis, diagnostics challenges and solutions
• Putting the right perspective on speckle tracking strain, is it all about
• Right Heart Failure
• The fantastic 4: the 4 best papers of my journal in 2017
• The role of stress echocardiography in non-ischemic heart disease
• Tricuspid valve in 2017: no longer forgotten
• Where clinicians and engineers look into the future

Teaching Courses

• 3D Echo for assessing the right ventricle - how and why?
• 3D Echo for assessing the left ventricle - why and how?
• Advanced difficulty TOE educational session. No frontiers!
• Advanced techniques
• Aortic stenosis: from natural history to intervention
• Application of ASE/EACVI Guidelines to assess diastolic function and filling pressure in patients with dyspnea
• Application of ASE/EACVI guidelines to assess diastolic function and filling pressure in special populations
• Arch abnormalities
• Assessment of diastolic function
• Basic principles & applications
• Basics of nuclear imaging
• Cardiovascular magnetic resonance assessment of structure and function
• Cardiovascular magnetic resonance in guiding patient management
• Cardiovascular magnetic resonance starter kit
• Clinical implementation
• Clinical use of 3D echo to assess ventricular geometry and function
• Intermediate difficulty TOE educational session. Deeper waters!
• Nuclear imaging in ischemic heart disease
• Nuclear imaging in myocardial and vascular diseases
• PFO and LA appendage
• Preliminary TOE educational session. Let’s start!
• Primary mitral regurgitation: from genetics to intervention
• Single ventricle
• Tetralogy of Fallot
• The aortic valve
• The mitral and tricuspid valves
• Valvular heart disease challenges in 2017

Teaching Courses Core Curriculum

• Advanced echo techniques I: quantitation of cardiac function and mechanics
• Advanced echo techniques II: basics, indications, protocols and interpretation
• Basics of 2D cardiac assessment
• Basics of cardiac ultrasound
• Cardiac masses and sources of embolism
• Non-invasive hemodynamic assessment by echocardiography
• Standard and advanced echocardiographic evaluation in cardiomyopathies
• Valvular heart disease 1
• Valvular heart disease 2
About the European Association of Cardiovascular Imaging (EACVI)
The European Association of Cardiovascular Imaging (EACVI) is a registered branch of the ESC. The European Society of Cardiology (ESC) is a not-for-profit medical society led by volunteers. Our mission is to reduce the burden of cardiovascular disease.

Through our global network of 56 Member National Cardiac Societies and 43 Affiliated Cardiac Societies we identify cardiovascular trends, address inequalities and share best practices to improve standards of care for patients.

The ESC counts 95 000 members from across the globe, including over 4 000 distinguished Fellows of the ESC. We cover the full spectrum of cardiology through our 27 subspecialty communities, giving us a unique perspective on all areas of cardiovascular science. The European Association of Cardiovascular Imaging is a registered branch of the ESC.

What we do
We provide our members and the global cardiology community with the support and tools they need to deliver the best possible care. In addition to the publication of 12 scientific journals, a variety of textbooks and internationally respected ESC Clinical Practice Guidelines, we do this through five strategic focus areas:

**CONGRESSES**
- ESC Congress – the world’s largest cardiovascular meeting
- Nine subspecialty congresses, including EuroEcho-Imaging

**EDUCATION**
- Online and face-to-face learning
- Certification

**RESEARCH**
- Registries and data collection

**ADVOCACY**
- Fostering partnerships and providing expertise to shape policy

**MEMBERSHIP**
- Join the world’s largest community of healthcare professionals fighting heart disease

Ethical integrity
The ESC adheres to the Alliance for Biomedical Research in Europe Code of Conduct to ensure objectivity, transparency and integrity.

Discover more about the ESC and how it can support you on the EACVI stand
The EACVI welcomes you to EuroEcho-Imaging 2017

The European Association of Cardiovascular Imaging (EACVI), a registered branch of the ESC, is a unified vibrant community gathering four imaging modalities under one entity (Echocardiography, Cardiovascular Magnetic Resonance, Nuclear Cardiology and Cardiac Computed Tomography). The EACVI is the world leading network of cardiovascular imaging experts, welcoming almost 10 000 professionals including cardiologists, sonographers, nurses, basic scientists and allied professionals.

Mission
To promote excellence in clinical diagnosis, research, technical development, and education in cardiovascular imaging.

Vision
The EACVI is a unified community of experts and a knowledge provider in Echocardiography, Cardiovascular Magnetic Resonance, Nuclear Cardiology and Cardiac CT modalities.

Values
The EACVI is committed to maintaining the highest standards of professional excellence in all cardiovascular imaging modalities, by providing an innovative educational platform and being research focused to meet the needs and expectations at any stage of its member’s careers.

Structure

<table>
<thead>
<tr>
<th>EACVI BOARD</th>
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<tr>
<td>Cardiovascular Magnetic Resonance Section</td>
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<tr>
<th>EACVI Committees</th>
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<tr>
<td>Education</td>
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</table>
TAKE THE NEXT STEP

Join your community

Get discounts on the EACVI congresses, publications and educational offers.

Receive a complimentary access to monthly webinars and a yearly subscription to the European Heart Journal - Cardiovascular Imaging.

Enjoy an exclusive access to EACVI congress resources, webinar recordings and members’ lounge.

50% discount offered to the young community, technicians and nurses.*

EACVI, the leading network of Cardiovascular Imaging experts

www.escardio.org/EACVI-membership

*conditions apply
The EACVI at a Glance

The EACVI is a vibrant community of almost 10 000 members from all over the world.

Conferences and events

Don’t miss the four EACVI congresses and events:
- EuroEcho-Imaging 2018: 5–8 December
- EuroCMR, next edition: CMR 2018, 31 January-3 February (a joint EuroCMR/SCMR meeting)
- ICNC 2019: 12-14 May (every 2 years)

Research

One of the priorities of the EACVI is to promote research, network and build-up large databases, in order to provide robust reference values especially for new technologies.

Scientific documents & publications

Over the years, the EACVI has published a significant number of documents. Many have been produced in collaboration with main players in the field of cardiovascular imaging and are published in the European Heart Journal - Cardiovascular Imaging (EHJ-CI), the journal of the EACVI. Its impact factor went from 1.917 in 2008 to 5.99 in 2017.

The EACVI also produces textbooks, guides and booklets, a goldmine of information. The EACVI Echo handbook is a success and the 2018 Compendium which gathers most of the scientific papers published by the EACVI in 2016 and 2017 has just been released.

Do you know that the EACVI produces printed abridged versions of its recommendations in a pocket format for a practical daily use? EACVI abridged recommendations contain the main messages from scientific documents in a concise format for a practical daily use. Titles available in English, Portuguese, French, Spanish, Chinese, Japanese and Turkish. Order your copies through your my ESC Account or visit the EACVI shop at the EACVI stand. Discounts are offered to Silver and Gold members.

A mobile app is also at your disposal: download for free the EACVI Recommendations App.
Laboratory Accreditation

The EACVI aims at raising the quality standards of equipment and practice across countries in a uniform manner. It is also designed as an educational tool to improve the overall quality of laboratories. EACVI Accredited Laboratories are centres of excellence and contribute actively to the EACVI research projects.

Individual Certification

The EACVI provides the only European certification of professional excellence in Echocardiography (TEE, TOE & CHD), Cardiovascular Magnetic Resonance (CMR and CMR CHD) and Nuclear Cardiology. The programme is designed to certify both practical experience and knowledge in these specialties. A minimum of eight exams are organised each year. The exams schedule is available on the dedicated EACVI webpage.

Education

The EACVI Education Committee aims at offering innovative and high quality practical tools to experts and fellows in order to support their professional development. Take part of our Educational Courses.

Learn from the experts

The EACVI e-learning programmes in Echocardiography, Cardiovascular Magnetic Resonance and Nuclear Cardiology and Cardiac Computed Tomography are based on the core syllabi of the EACVI. They provide the required knowledge to be at the cutting-edge of each field. The e-learning programmes include didactic tutorials created by leading experts in TTE, TOE, CMR, Nuclear Cardiology and Cardiac CT.

www.escardio.org/eacvi-e-learning

Distance learning

Make the most of the EACVI distance learning material.

- Webinars (11+ sessions/year) and recordings
- EACVI Recommendations Mobile app
- Clinical Case Gallery
- Imaging Tool Boxes
- EduCAD Platform
- Pocket Size Ultrasound Devices Course
- Slides and webcasts from EACVI congresses and courses
- Key Reference Libraries

EACVI Grants in Research & Training

The EACVI offers opportunities for young imagers to get training or research experience abroad for a period of 3 to 12 months in non-invasive imaging modalities at a high standard academic centre, clinical centre or university within an ESC Member’s country other than their own. Application is open to cardiovascular imagers under 38 years old or under 40 in training. Yearly application deadline is 30 September.
Learn from imaging experts

E-learning programmes in Echocardiography, in Cardiovascular Magnetic Resonance and in Nuclear Cardiology and Cardiac Computed Tomography.

Including didactic video tutorials in TOE, TTE, CMR, Nuclear Cardiology, Cardiac CT and much more

www.escardio.org/e-learning-echo
www.escardio.org/e-learning-cmr
www.escardio.org/e-learning-nuc-cct
Make the most of your visit at EuroEcho-Imaging 2017

Visit the EACVI stand
The team will be pleased to answer any of your questions.

Membership area
Learn more about the 2018 membership programme and join.
Joining the Association gives you exclusive access to resources, products and discounts.

Special discount on Silver membership.
Exclusively for EuroEcho-Imaging paying delegates, until 9 December 2017. Not applicable to day ticket holders.

EACVI shop
Get your EACVI publications copies:
• Echocardiography Textbook - Second edition
• Echo Handbook
• 2018 Compendium
• Abridged recommendations
• CMR pocket guides
• Scientific posters

Have a break in the Members’ Lounge
Restricted to 2017 and 2018 Silver & Gold members.
Meet with colleagues, read emails or simply enjoy a cup of coffee in your exclusive area.

The lounge is located on the 1st floor.
Opening hours:
• Wednesday 6 December: 08:00 - 18:30
• Thursday 7 December: 08:00 - 18:30
• Friday 8 December: 08:00 - 18:30
• Saturday 9 December: 08:00 - 12:00

Certification exams
Discounted fees for Silver and Gold EACVI members
Four exams are organised during EuroEcho-Imaging 2017:

• Nuclear Cardiology on Thursday 7 December
• Adult Transthoracic Echocardiography (TTE) on Thursday 7 December
• Adult Transesophageal Echocardiography (TOE) on Friday 8 December
• Congenital Heart Disease Echocardiography (CHD) on Friday 8 December

The duration of each exam is approximately 5 hours.
Books
• Textbook on Echocardiography - Second edition
• 2018 Compendium: including most of the scientific papers published by the EACVI in 2016 and 2017
• Echo Handbook

Abridged Recommendations
• Aortic & Pulmonary Regurgitation*
• Mitral & Transcuspidx Regurgitation**
• Infective Endocarditis***
• Transcatheter Interventions**
• Diastolic Function*
• Radiotherapy***
• Transoesophageal Echocardiography***
• Pericardial Disease**
• Multi-modality imaging in Hypertrophic Cardiomyopathy**

CMR Pocket Guides
• Congenital Heart Disease
• Physics for Clinicians
• General Pocket Guide - 2017 edition

Scientific & Illustrated Posters
• Diastolic function
• 3D Echo
• Valve Stenosis

* Available in English only. ** Available in English and Spanish
*** Available in English, French, Portuguese and Chinese

Exclusive discounts for EACVI members
EACVI SILVER MEMBERSHIP
for 100€
only during the congress*

*Instead of 156€ for the 2018 membership. Restricted to paying EuroEcho-Imaging 2017 delegates. Not applicable to day ticket holders.

...see you at
the EACVI stand

WANT MORE?
Mix and match the ESC membership packages that best suit your needs for unique savings and benefits.
Wednesday Sessions
Teaching Courses: Follow a whole subject in the same room all day & prepare the EACVI certification exam!

Course on Valvular Heart Disease (VHD)  

**WEDNESDAY 6 DECEMBER 2017 - TEACHING COURSES**

**Course on Valvular Heart Disease (VHD)**

**09:00 - 10:30**

**Aortic stenosis: from natural history to intervention**

**Chairpersons:** V. Delgado (Leiden, NL); A. Calin (Bucharest, RO)

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Natural history: new perspectives for pharmacologic treatment?</td>
<td>R. Rosenhek (Vienna, AT)</td>
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<td>09:22</td>
<td>Doppler-echo assessment of AS: tips and tricks.</td>
<td>R.E. Dulgheru (Liege, BE)</td>
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<td>09:45</td>
<td>The role of multi-modality imaging in aortic stenosis.</td>
<td>M.-A. Clavel (Quebec, CA)</td>
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<td>10:07</td>
<td>TAVI vs surgery in patients with intermediate and low surgical risk.</td>
<td>P. Pibarot (Quebec, CA)</td>
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**11:00 - 12:30**

**Primary mitral regurgitation: from genetics to intervention**

**Chairpersons:** J. Magne (Limoges, FR); B. Cosyns (Brussels, BE)

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<th>Time</th>
<th>Title</th>
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<tr>
<td>11:00</td>
<td>Genetics of mitral valve prolapse.</td>
<td>A.A. Hagege (Paris, FR)</td>
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<tr>
<td>11:22</td>
<td>Doppler-echo quantitation of MR: tips and tricks.</td>
<td>R.E. Dulgheru (Liege, BE)</td>
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<tr>
<td>11:45</td>
<td>Role of multimodality imaging in mitral regurgitation.</td>
<td>P. Pibarot (Quebec, CA)</td>
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<tr>
<td>12:07</td>
<td>Perspectives on percutaneous interventions.</td>
<td>G. La Canna (Rodengo Saiano, IT)</td>
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**14:00 - 15:30**

**Valvular heart disease challenges in 2017**

**Chairpersons:** L.A. Pierard (Liege, BE); J.L. Zamorano Gomez (Madrid, ES)

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<tr>
<th>Time</th>
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<tr>
<td>14:00</td>
<td>Ischaemic MR: when and how to intervene?</td>
<td>J. Magne (Limoges, FR)</td>
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<tr>
<td>14:22</td>
<td>Patient-prosthesis mismatch: is it still issue in the TAVI era.</td>
<td>P. Pibarot (Quebec, CA)</td>
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<tr>
<td>14:45</td>
<td>Asymptomatic severe AS: early AVR or watchful waiting?</td>
<td>B. Chambers (London, GB)</td>
</tr>
<tr>
<td>15:07</td>
<td>Secondary tricuspid regurgitation: should it be treated and how?</td>
<td>R. Hahn (New York, US)</td>
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Course on Diastolic Function
Joint session with the American Society of Echocardiography (ASE)

09:00 - 10:30

Assessment of diastolic function

Chairpersons: O.A. Smiseth (Oslo, NO); A. Klein (Cleveland, US)

09:00  Assessment of diastolic function in the cath lab.
       J.W. Ha (Seoul, KR)                        5

09:22  Mitral inflow, LA volumes, tissue Doppler velocities and PA pressures.
       S. Nagueh (Houston, US)                   6

09:45  LV strain and twist and LA strain.
       H. Skulstad (Oslo, NO)                    7

10:07  CMR and Nuclear techniques for diastolic function assessment.
       F.E. Rademakers (Leuven, BE)             8

11:00 - 12:30

Application of ASE/EACVI Guidelines to assess diastolic function and filling pressure in patients with dyspnea

Chairpersons: B.A. Popescu (Bucharest, RO); S. Nagueh (Houston, US)

11:00  Guidelines for patients with HFrEF.
       H. Dokainish (Hamilton, CA)               53

11:22  Guidelines for patients with HFpEF.
       O.A. Smiseth (Oslo, NO)                   54

11:45  Diastolic stress test.
       J.K. Oh (Rochester, US)                   55

12:07  Assessment of LV filling pressure in primary pulmonary hypertension.
       M. Galderisi (Naples, IT)                 56

14:00 - 15:30

Application of ASE/EACVI guidelines to assess diastolic function and filling pressure in special populations

Chairpersons: F. Flachskampf (Uppsala, SE); H. Dokainish (Hamilton, CA)

14:00  Atrial fibrillation.
       P.N. Marino (Novara, IT)                  121

14:22  Hypertrophic cardiomyopathy (HCM).
       N. Cardim (Lisbon, PT)                    122

14:45  Amyloidosis.
       A. Klein (Cleveland, US)                  123

15:07  Mitral valve disease.
       F. Flachskampf (Uppsala, SE)              124
Course on three-dimensional echocardiography  

**FARO**

**Wednesday 6 December 2017 - Teaching Courses**

### 09:00 - 10:30

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td><strong>3D Echo for assessing the left ventricle - why and how?</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Chairpersons:</strong> A. Hagendorff (Leipzig, DE); M.J. Monaghan (London, GB)</td>
</tr>
<tr>
<td>09:00</td>
<td>Tips, tricks and pitfalls of 3D analysis of the left ventricle.</td>
</tr>
<tr>
<td></td>
<td>J.D. Kasprzak (Lodz, PL)</td>
</tr>
<tr>
<td>09:22</td>
<td>Multi-Vendor comparison of 3D software for volume and strain.</td>
</tr>
<tr>
<td></td>
<td>L. Badano (Padova, IT)</td>
</tr>
<tr>
<td>09:45</td>
<td>Automation of 3D LV analysis - a step to far?</td>
</tr>
<tr>
<td></td>
<td>O. Kamp (Amsterdam, NL)</td>
</tr>
<tr>
<td>10:07</td>
<td>Why and how to implement 3D echo in the routine of the echo lab.</td>
</tr>
<tr>
<td></td>
<td>J.K. Kisslo (Durham, US)</td>
</tr>
</tbody>
</table>

### 11:00 - 12:30

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>11:00</td>
<td><strong>3D Echo for assessing the right ventricle - how and why?</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Chairpersons:</strong> L. Badano (Padova, IT); M.J. Monaghan (London, GB)</td>
</tr>
<tr>
<td>11:00</td>
<td>What is the advantage of 3D RV evaluation?</td>
</tr>
<tr>
<td></td>
<td>M. Takeuchi (Kitakyushu, JP)</td>
</tr>
<tr>
<td>11:22</td>
<td>How to do it - tips and tricks.</td>
</tr>
<tr>
<td></td>
<td>R.S. Von Bardeleben (Mainz, DE)</td>
</tr>
<tr>
<td>11:45</td>
<td>More than volumes and ejection fraction: shape and mechanics!</td>
</tr>
<tr>
<td></td>
<td>A. Kovacs (Budapest, HU)</td>
</tr>
<tr>
<td>12:07</td>
<td>Lessons learned about RV by using 3D echo - clinical cases.</td>
</tr>
<tr>
<td></td>
<td>D. Muraru (Padua, IT)</td>
</tr>
</tbody>
</table>

### 14:00 - 15:30

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00</td>
<td><strong>Clinical use of 3D echo to assess ventricular geometry and function</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Chairpersons:</strong> F.J. Ten Cate (Rotterdam, NL); J. Hung (Boston, US)</td>
</tr>
<tr>
<td>14:00</td>
<td>Why and how should we use 3D echo in right heart disease.</td>
</tr>
<tr>
<td></td>
<td>J.D. Morales Portano (Mexico, MX)</td>
</tr>
<tr>
<td>14:22</td>
<td>Why and how should we use 3D echo in heart failure?</td>
</tr>
<tr>
<td></td>
<td>S. Kapetanakis (London, GB)</td>
</tr>
<tr>
<td>14:45</td>
<td>Why and how should we use 3D echo in heart valve diseases?</td>
</tr>
<tr>
<td></td>
<td>N. Ajmone Marsan (Leiden, NL)</td>
</tr>
<tr>
<td>15:07</td>
<td>Why and how should we use 3D echo in cancer patients treated with potentially cardiotoxic drugs?</td>
</tr>
<tr>
<td></td>
<td>M.J. Monaghan (London, GB)</td>
</tr>
</tbody>
</table>
Course on multi-modality imaging in the cath lab: become an expert!  

09:00 - 10:30

The aortic valve

**Chairpersons: A.M.G. Almeida (Lisbon, PT); J. Bergler-Klein (Vienna, AT)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>TAVI 2017 - New methods for quantification of aortic stenosis: a critical appraisal.</td>
<td>L.A. Pierard (Liege, BE)</td>
</tr>
<tr>
<td>09:22</td>
<td>Imaging: before procedure and intra-procedural guidance.</td>
<td>R. Ribeiras (Sintra - Lisbon, PT)</td>
</tr>
<tr>
<td>09:45</td>
<td>Imaging for follow-up - which techniques? Which strategies?</td>
<td>C. Sousa (Porto, PT)</td>
</tr>
<tr>
<td>10:07</td>
<td>The future is here: new devices &amp; prosthesis, valve-in-valve, stroke prevention and more....</td>
<td>D. Dudek (Krakow, PL)</td>
</tr>
</tbody>
</table>

11:00 - 12:30

The mitral and tricuspid valves

**Chairpersons: F. Sampaio (Vn Gaia, PT); P. Lancellotti (Liege, BE)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>11:00</td>
<td>How to assess mitral valve regurgitation for intervention.</td>
<td>P. Carrilho-Ferreira (Lisbon, PT)</td>
</tr>
<tr>
<td>11:22</td>
<td>Mitraclip selection and intraprocedure guidance with TEE</td>
<td>J.M. Ribeiro (Vila Nova De Gaia, PT)</td>
</tr>
<tr>
<td>11:45</td>
<td>Imaging for early and late follow-up.</td>
<td>M.G. Trabulo Corte-Real (Lisbon, PT)</td>
</tr>
<tr>
<td>12:07</td>
<td>What’s new? Valve-in-valve, transcatheter annuloplasty, TMVI and more.</td>
<td>F. Maisano (Zurich, CH)</td>
</tr>
</tbody>
</table>

14:00 - 15:30

PFO and LA appendage

**Chairpersons: J.M. Almeida (Porto, PT); X. Freixa Rofaster (Barcelona, ES)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Presenter</th>
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</thead>
<tbody>
<tr>
<td>14:00</td>
<td>LA appendage closure: indications and role of TEE.</td>
<td>N.C. Wunderlich (Darmstadt, DE)</td>
</tr>
<tr>
<td>14:22</td>
<td>LA appendage closure: role of CT and CMR.</td>
<td>M.J. Garcia (Bronx, US)</td>
</tr>
<tr>
<td>14:45</td>
<td>PFO closure: indications and role of imaging before the procedure.</td>
<td>L.M.M. Branco (Lisbon, PT)</td>
</tr>
<tr>
<td>15:07</td>
<td>PFO closure: which modalities for guidance - is ICE that cool? Imaging for follow-up.</td>
<td>J.M. Ribeiro (Vila Nova De Gaia, PT)</td>
</tr>
</tbody>
</table>
## Course on Transoesophageal Echocardiography (TOE)  
**Evora**

### 09:00 - 10:30

**Preliminary TOE educational session. Let’s start!**

**Chairpersons:** C.M. Mukherjee (Karlsruhe, DE); A. Kranidis (Athens, GR)

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>A comprehensive 2D-3D TOE study; from A to Z.</td>
<td>V. Barberis (Nicosia, CY)</td>
<td>17</td>
</tr>
<tr>
<td>09:22</td>
<td>LV function assessment.</td>
<td>C.H. Papadopoulos (Athens, GR)</td>
<td>18</td>
</tr>
<tr>
<td>09:45</td>
<td>Prosthetic valves: echo challenges.</td>
<td>C.M. Mukherjee (Karlsruhe, DE)</td>
<td>19</td>
</tr>
<tr>
<td>10:07</td>
<td>Artifacts and Pitfalls.</td>
<td>J.M. Erb (Weil Am Rhein, DE)</td>
<td>20</td>
</tr>
</tbody>
</table>

### 11:00 - 12:30

**Intermediate difficulty TOE educational session. Deeper waters!**

**Chairpersons:** F. Guarracino (Pisa, IT); S. Kyrzopoulos (Athens, GR)

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>3D perspective for examination of mitral valve.</td>
<td>A. Patrianakos (Heraklion, GR)</td>
<td>65</td>
</tr>
<tr>
<td>11:22</td>
<td>Mitral valve surgery: Repair or replace?</td>
<td>F.F. Faletra (Lugano, CH)</td>
<td>66</td>
</tr>
<tr>
<td>11:45</td>
<td>Hypertrophic obstructive cardiomyopathy: Resect or not to resect: That’s the question.</td>
<td>F. Guarracino (Pisa, IT)</td>
<td>67</td>
</tr>
<tr>
<td>12:07</td>
<td>Invasive Cardiology and TOE, a permanent relationship.</td>
<td>D. Patsouras (Ioannina, GR)</td>
<td>68</td>
</tr>
</tbody>
</table>

### 14:00 - 15:30

**Advanced difficulty TOE educational session. No frontiers!**

**Chairpersons:** D. Tsiapras (Athens, GR); P.F. Wouters (Gent, BE)

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker</th>
<th>Page</th>
</tr>
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<tbody>
<tr>
<td>14:00</td>
<td>Mitraclip: how do I confirm a perfect placement through echocardiography guidance.</td>
<td>J. Ender (Leipzig, DE)</td>
<td>133</td>
</tr>
<tr>
<td>14:22</td>
<td>TAVR vs SAVR: for whom and why?</td>
<td>D. Tsiapras (Athens, GR)</td>
<td>134</td>
</tr>
<tr>
<td>14:45</td>
<td>TEE determinants for assist device or transplant?</td>
<td>D. Greenhalgh (Manchester, GB)</td>
<td>135</td>
</tr>
<tr>
<td>15:07</td>
<td>Myocardial imaging: Is it only for research, or have we advanced for routine use?</td>
<td>P.F. Wouters (Gent, BE)</td>
<td>136</td>
</tr>
</tbody>
</table>
### Course on Congenital Heart Disease (CHD)

**09:00 - 10:30**

#### Tetralogy of Fallot

Chairpersons: O. Miller (London, GB); L. Mertens (Toronto, CA)

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
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</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Embryology, anatomy, pathology of normal and variations.</td>
<td>M.R.M. Jongbloed (Leiden, NL)</td>
</tr>
<tr>
<td>09:22</td>
<td>Preoperative imaging: minimum dataset.</td>
<td>K. Bilska (London, GB)</td>
</tr>
<tr>
<td>09:45</td>
<td>Multimodality assessment during late follow up.</td>
<td>E.R. Valsangiacom Buechel (Zurich, CH)</td>
</tr>
</tbody>
</table>

**11:00 - 12:30**

#### Single ventricle

Chairpersons: W. Budts (Leuven, BE); J. Simpson (London, GB)

<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>11:00</td>
<td>Embryology, anatomy, anatomy-pathology.</td>
<td>M.R.M. Jongbloed (Leiden, NL)</td>
</tr>
<tr>
<td>11:45</td>
<td>MultiModality assessment at each stage.</td>
<td>H. Bellsham-Revell (London, GB)</td>
</tr>
<tr>
<td>12:07</td>
<td>Imaging in follow-up of patients after Fontan repair.</td>
<td>A. Van De Bruaene (Toronto, CA)</td>
</tr>
</tbody>
</table>

**14:00 - 15:30**

#### Arch abnormalities

Chairpersons: J. Marek (London, GB); F.J. Meijboom (Utrecht, NL)

<table>
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<tr>
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<tbody>
<tr>
<td>14:00</td>
<td>Embryology &amp; anatomy.</td>
<td>M.R.M. Jongbloed (Leiden, NL)</td>
</tr>
<tr>
<td>14:22</td>
<td>Optimal imaging for rings, slings and other things.</td>
<td>I. Voges (London, GB)</td>
</tr>
<tr>
<td>14:45</td>
<td>Imaging of aortic arch obstruction in children and adults.</td>
<td>H. Grotenhuis (Utrecht, NL)</td>
</tr>
<tr>
<td>15:07</td>
<td>Deformation imaging in arch abnormalities.</td>
<td>L. Lopez (Miami, US)</td>
</tr>
</tbody>
</table>
### Course on Cardiovascular Magnetic Resonance (CMR)

**GUARDA**

**09:00 - 10:30**

**Cardiovascular magnetic resonance starter kit**

Chairpersons: C. Bucciarelli-Ducci (Bristol, GB); R.M. Manka (Zurich, CH)

<table>
<thead>
<tr>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Basic MR physics and safety in a nutshell.</td>
<td>R.M. Manka (Zurich, CH)</td>
</tr>
<tr>
<td>09:22</td>
<td>MR physics relevant for cardiac applications.</td>
<td>J.F. Rodriguez Palomares (Barcelona, ES)</td>
</tr>
<tr>
<td>09:45</td>
<td>Spotting and dealing with extracardiac incidental findings on CMR scans.</td>
<td>M. Lombardi (San Donato Milanese, IT)</td>
</tr>
<tr>
<td>10:07</td>
<td>When is CMR indicated: a multimodality imager’s perspective.</td>
<td>B.L.M. Gerber (Woluwe-St. Lambert, BE)</td>
</tr>
</tbody>
</table>

**11:00 - 12:30**

**Cardiovascular magnetic resonance assessment of structure and function**

Chairpersons: N. Bettencourt de Sousa (Porto, PT); R. Nijveldt (Amsterdam, NL)

<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>11:00</td>
<td>CMR assessment of ventricular and atrial size, shape and function (including strain imaging).</td>
<td>M. Dweck (Edinburgh, GB)</td>
</tr>
<tr>
<td>11:22</td>
<td>CMR assessment of myocardial fibrosis (including late gadolinium enhancement and T1 mapping).</td>
<td>R.M. Manka (Zurich, CH)</td>
</tr>
<tr>
<td>11:45</td>
<td>CMR assessment of flow (including 4D flow).</td>
<td>A.M.G. Almeida (Lisbon, PT)</td>
</tr>
<tr>
<td>12:07</td>
<td>CMR approaches to assess adult congenital heart disease.</td>
<td>E.R. Valsangiacomo Buechel (Zurich, CH)</td>
</tr>
</tbody>
</table>

**14:00 - 15:30**

**Cardiovascular magnetic resonance in guiding patient management**

Chairpersons: A.M.G. Almeida (Lisbon, PT); M. Motwani (Manchester, GB)

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<tbody>
<tr>
<td>14:00</td>
<td>CMR can guide management in heart failure.</td>
<td>R. Nijveldt (Amsterdam, NL)</td>
</tr>
<tr>
<td>14:22</td>
<td>CMR can guide management in inpatients.</td>
<td>M. Westwood (London, GB)</td>
</tr>
<tr>
<td>14:45</td>
<td>CMR can guide management in suspected or known coronary artery disease.</td>
<td>M. Motwani (Manchester, GB)</td>
</tr>
<tr>
<td>15:07</td>
<td>CMR can guide management in cardiomyopathies.</td>
<td>J.F. Rodriguez Palomares (Barcelona, ES)</td>
</tr>
</tbody>
</table>
### Course on Computed Tomography (CT)

**IMAGING CAMPUS 1**

**09:00 - 10:30**

#### Basic principles & applications

**Chairpersons:** M. Marwan (Erlangen, DE); P. Maurovich-Horvat (Budapest, HU)

To cover the major topics of the EACVI Cardiac CT Core Syllabus and key elements of knowledge in Cardiac CT. It will represent a relevant part of training curricula providing expected knowledge-based learning outcomes to the cardiac CT trainees. Specific attention will be devoted to present both consolidated applications and recent innovations. Discuss evidence-based cardiac CT applications, and demonstrate appropriate utilization from clinical cases.

<table>
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<tbody>
<tr>
<td>09:00</td>
<td>Principles of cardiac CT: from photons to pictures.</td>
<td>A. Rossi (Rotterdam, NL)</td>
</tr>
<tr>
<td>09:22</td>
<td>Scan protocols: maximum quality, minimal dose.</td>
<td>M. Marwan (Erlangen, DE)</td>
</tr>
<tr>
<td>09:45</td>
<td>Coronary CT angiography for stable angina: the evidence.</td>
<td>G. Pontone (Milan, IT)</td>
</tr>
<tr>
<td>10:07</td>
<td>Structural heart disease.</td>
<td>M.H. Al Mallah (Riyadh, SA)</td>
</tr>
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</table>

**11:00 - 12:30**

#### Advanced techniques

**Chairpersons:** O. Gaemperli (Zurich, CH); P. Maurovich-Horvat (Budapest, HU)

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<tbody>
<tr>
<td>11:00</td>
<td>Complex coronary disease, stents and grafts.</td>
<td>A. Rossi (Rotterdam, NL)</td>
</tr>
<tr>
<td>11:22</td>
<td>Myocardial infarction, perfusion and CT-based FFR.</td>
<td>G. Pontone (Milan, IT)</td>
</tr>
<tr>
<td>11:45</td>
<td>Plaque imaging for risk predictions.</td>
<td>P. Maurovich-Horvat (Budapest, HU)</td>
</tr>
<tr>
<td>12:07</td>
<td>Hybrid imaging.</td>
<td>O. Gaemperli (Zurich, CH)</td>
</tr>
</tbody>
</table>

**14:00 - 15:30**

#### Clinical implementation

**Chairpersons:** O. Gaemperli (Zurich, CH); M.H. Al Mallah (Riyadh, SA)

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<tbody>
<tr>
<td>14:00</td>
<td>Acute chest pain and other emergencies.</td>
<td>A. Dedic (Rotterdam, NL)</td>
</tr>
<tr>
<td>14:22</td>
<td>Complex structural heart conditions.</td>
<td>P. Maurovich-Horvat (Budapest, HU)</td>
</tr>
<tr>
<td>14:45</td>
<td>Congenital conditions in kids and grown-ups.</td>
<td>M. Hughes (London, GB)</td>
</tr>
<tr>
<td>15:07</td>
<td>CT guided interventions: TAVI and beyond.</td>
<td>M. Marwan (Erlangen, DE)</td>
</tr>
</tbody>
</table>
Course on Nuclear Cardiology (NC)  
IMAGING CAMPUS 2

09:00 - 10:30

<table>
<thead>
<tr>
<th>Basics of nuclear imaging</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chairpersons:</strong> D. Neglia (Pisa, IT); P. Knaapen (Amsterdam, NL)</td>
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<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Physics, radiotracers, instrumentation and how to do cardiac SPECT/PET.</td>
</tr>
<tr>
<td></td>
<td>H.J. Verberne (Amsterdam, NL)</td>
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<tr>
<td>09:20</td>
<td>Stress- and imaging-protocols, radiation exposure and clinical examples.</td>
</tr>
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<td>A. Kitsiou (Athens, GR)</td>
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<tr>
<td>09:40</td>
<td>Image interpretation, pitfalls and artefacts and imaging examples.</td>
</tr>
<tr>
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<td>E. Reyes (London, GB)</td>
</tr>
<tr>
<td>10:00</td>
<td>How to perform a clinically meaningful report and clinical examples.</td>
</tr>
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<td>S.R. Underwood (London, GB)</td>
</tr>
<tr>
<td>10:20</td>
<td>Discussion</td>
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</table>

11:00 - 12:30

<table>
<thead>
<tr>
<th>Nuclear imaging in ischemic heart disease</th>
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<tbody>
<tr>
<td><strong>Chairpersons:</strong> S.R. Underwood (London, GB); A. Gimelli (Pisa, IT)</td>
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<tr>
<td>11:00</td>
<td>Management of CAD: diagnosis and clinical decision making.</td>
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<td></td>
<td>P. Knaapen (Amsterdam, NL)</td>
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<td>D. Neglia (Pisa, IT)</td>
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<tr>
<td>11:40</td>
<td>Heart failure: viability and innervation.</td>
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<td></td>
<td>A. Gimelli (Pisa, IT)</td>
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<tr>
<td>12:00</td>
<td>Heart failure: Interactive clinical cases.</td>
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<tr>
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<td>A. Saraste (Turku, FI)</td>
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<tr>
<td>12:20</td>
<td>Discussion</td>
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14:00 - 15:30

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<thead>
<tr>
<th>Nuclear imaging in myocardial and vascular diseases</th>
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<tbody>
<tr>
<td><strong>Chairpersons:</strong> A. Kitsiou (Athens, GR); A. Gimelli (Pisa, IT)</td>
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<thead>
<tr>
<th>Time</th>
<th>Topic</th>
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<tbody>
<tr>
<td>14:00</td>
<td>Cardiomyopathies: diagnosis, risk stratification, treatment and interactive clinical case.</td>
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<tr>
<td></td>
<td>A.J.H.A. Scholte (Leiden, NL)</td>
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<tr>
<td>14:20</td>
<td>Arrhythmias: risk stratification, ablation and interactive clinical case.</td>
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<td>A. Gimelli (Pisa, IT)</td>
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<tr>
<td>14:40</td>
<td>Myocardial inflammation and infiltration and interactive clinical case.</td>
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<td>K. Wechalekar (London, GB)</td>
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<tr>
<td>15:00</td>
<td>Radionuclide imaging in IE/CDRIE: diagnosis, treatment and interactive clinical case.</td>
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<td>P.A. Erba (Pisa, IT)</td>
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<tr>
<td>15:20</td>
<td>Conclusion</td>
</tr>
</tbody>
</table>

43
Other sessions

09:00 - 10:30  Rapid Fire Abstract  AGORA

Up-to-date research on left ventricular function

Chairpersons: T. Koliás (Ann Arbor, US); L. Pérez De Isla (Madrid, ES)

09:00  Panel of experts: J.J. Voigt (Leuven, BE); J.D. Kasprzak (Lodz, PL)

09:00  Subclinical markers of cardiovascular disease predict adverse outcomes in chronic kidney disease patients with normal left ventricular ejection fraction.
S. Sulemane, V. Panoulas, A. Bratas, P. Nihoyannopoulos (London, GB)

09:09  Left ventricular deformation by 3D speckle tracking echocardiography and 3D cardiac magnetic resonance tagging, a validation study

09:18  The cardiac isovolumetric contraction time is an independent predictor of incident atrial fibrillation and adverse outcomes following first atrial fibrillation event in the general population
A. Saed Alhakak, P. Brainin, R. Mogelvang, J. Skov Jensen, T. Biering-Sorensen (Copenhagen, DK)

09:27  Inter-operator variability of shapes and strain patterns: insights from a myocardial strain course
N. Duchateau, M. Cikes, A. Doltra, M. Sitges, B. Bijns (Lyon, FR; Zagreb, HR; Barcelona, ES)

09:36  Reference values for left ventricular size in contrast echocardiography: a cohort of 1 316 cases
R. Paakkanen, W. He, J. Choy, E. Mirhadi, E.P. Pitushkin, J. Mackey, H. Becher (Helsinki, FI; Edmonton, CA)

09:45  Echocardiographic Estimation of Left Filling Pressures
S. Abram, C. Magnino, A. Milan (Turin, IT)

09:54  Effect of left ventricular augmentation with Algysil-LVR device: 12 month follow-up

L. Reis, J. Bispo, B. Marmelo, M. Oliveira, R. Santos, K. Domingues, R. Faria, A. Marreiros, N. Marques (Coimbra, Faro, Viseu, Guimaraes, Penafiel and Santarem, PT)

10:12  Papillary muscles dimensions. Dark side of the heart
G. Díaz Babio, G. Vera Janavel, C. Carrero, M. Mezzadra, G. Masson Juarez, R. Perez Etchepare, P. Stutzbach (Buenos Aires, AR)

10:21  Standard transthoracic echocardiography in chronic heart failure- an old but still a convenient tool
E. Iarca, B. Neagoe, L. Jupoiu, A. Luta, O. Khazei, I. Barsan, L. Muntean-Mahjoub, A. Gabor, V. Gorgan, I. Iarca, C. Zara (Brasov, RO)

10:30 - 11:00  How-to Session  PORTO

How to prepare for EACVI CMR certification exam
EACVI HIT (Heart Imagers of Tomorrow)

Chairpersons: T. Lapinskas (Kaunas, LT)

How-to session provides practical details and tools or tips and tricks on a specific topic related to the research. These sessions are built to help attendees to improve their experiences to complete successfully research project: from founding and grant application, to data analysis, results presentation and publication.

10:30  Presenter:
M. Westwood (London, GB)
Diagnosis and management of cardiomyopathies: overcoming the challenges

Chairpersons: S. Nakatani (Takarazuka, JP); T. Kukulski (Zabrze, PL)

Young clinicians will present their cases and experts will be asked to moderate the sessions, facilitate interaction with the audience, prompt discussions, challenge the presenters and the audience.

The main objective of the session is to learn from challenging clinical case scenarios.

11:00 - 12:30 Clinical Cases  AGORA

**Diagnosis and management of cardiomyopathies: overcoming the challenges**

**Chairpersons:** S. Nakatani (Takarazuka, JP); T. Kukulski (Zabrze, PL)

*Young clinicians will present their cases and experts will be asked to moderate the sessions, facilitate interaction with the audience, prompt discussions, challenge the presenters and the audience. The main objective of the session is to learn from challenging clinical case scenarios.*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>11:00</td>
<td><strong>Panel of experts:</strong></td>
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<td></td>
<td>G. Athanassopoulos (Pireas, GR); G.L. Nicolosi (Cordenons, IT)</td>
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<td>11:00</td>
<td><strong>Dyspnea in hypertrophic cardiomyopathy:</strong></td>
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<td>V. Labate (Milan, IT)</td>
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<td>11:09</td>
<td><strong>Perforated aneurysm of the anterior mitral leaflet in a patient:</strong></td>
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<td>A. Marques (Braga, PT)</td>
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<td>11:18</td>
<td><strong>An unusual case of left ventricle apex involvement in hypertrophic cardiomyopathy</strong></td>
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<td>V.M. Parato (San Benedetto Del Tronto, IT)</td>
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<tr>
<td>11:27</td>
<td><strong>Giant apical aneurysm associated with supravalvular aortic stenosis, coronary arteriopathy and mid-ventricular hypertrophic cardiomyopathy</strong></td>
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<td>O. Musayev (Baku, AZ)</td>
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<td>11:36</td>
<td><strong>More than just a cardiomyopathy</strong></td>
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<td>A.A.M. Farrag (Cairo, EG)</td>
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<td>11:45</td>
<td><strong>The sparkling myocardium: a bizarre cardiomyopathy expression</strong></td>
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<td>M. Trega (Porto, PT)</td>
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<td>11:54</td>
<td><strong>Cardiopulmonary exercise test combined with exercise echocardiography as a tool for a comprehensive evaluation in a case of severe restrictive cardiomyopathy due to cardiac amyloidosis.</strong></td>
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<td>M.P. del Corral (San Donato Milanese, IT)</td>
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<td>12:03</td>
<td><strong>A case of light-chain amyloidosis with isolated cardiac involvement</strong></td>
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<td>R. Baggen Santos (Porto, PT)</td>
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<td>12:12</td>
<td><strong>Management of a rare cardiomyopathy presented with congestive heart failure and electrical storm</strong></td>
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<td>A. Covaliov (Bucharest, RO)</td>
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<td>12:21</td>
<td><strong>Cardiac amyloidosis mimicking post partum cardiomyopathy: an Indonesia experience</strong></td>
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<td>S. Azizi (Jakarta Pusat, ID)</td>
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**Workshop TOE Room**

*Focus on heart valve disease*

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

<table>
<thead>
<tr>
<th>Time</th>
<th>Workshop</th>
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<tr>
<td>11:00</td>
<td><strong>Presenters:</strong></td>
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<tr>
<td></td>
<td>M. M. Gurzun (Bucharest, RO); P. R. Fazendas (Almada, PT)</td>
</tr>
</tbody>
</table>
12:45 - 13:45 Satellite Symposium
EVORA

The future of echo is measurable: how to achieve over 200+ automated measurement in a daily practice
Sponsored by Siemens Healthineers

Chairpersons: R. Ribeiras (Lisbon, PT); S. Datta (Mountain View, US)

12:45  Making interventional procedures with fusion technology.  
R. Schueler (Bonn, DE)  

13:05  Mitral regurgitation and echo: From guideline standards to new technology.  
F. Knebel (Berlin, DE)

13:55  Coronary flow reserve from bench to bedside.  
S. Svedlund (Gothenburg, Sweden)

12:45 - 13:45 Moderated Posters

Best moderated posters of HIT community
EACVI HIT (Heart Imagers of Tomorrow)

Chairpersons: M. Henein (Umea, SE); C. Zito (Messina, IT)

Moderated poster session presenting the best contribution of young presenters

Effects of sildenafil on right ventricular function at rest and during exercise in chronic thromboembolic disease: an exercise cardiac magnetic resonance study. 
P101
M. Claeys, G. Claessen, A. La Gerche, F. Helsen, C. Belge, P. Claus, J. Bogaert, R. Willems, M. Delcroix (Leuven, BE; Melbourne, AU)

Impairment of right atrial and ventricular strain in obese and overweight patients: 2D speckle tracking echocardiography-derived results from the BEFRI trial 
P102
A. Brand, M. Bathe, U. Seeland, S. Oertelt-Prigione, V. Regitz-Zagrosek, K. Stangl, H. Dreger, V. Stangl, F. Knebel (Berlin, DE)

Incremental value of left ventricular strain and left atrial asynchrony over CHA2DS2-VASc Score in patients with atrial fibrillation 
P103
K. Kupczynska, B.W. Michalski, D. Miskowiec, J.D. Kasprzak, E. Szymczyk, P. Wejner-Mik, P. Lipeic (Lodz, PL)

Assessment of right ventricular function in advanced heart failure: the role and importance of right ventricular elastance 
P104
F. Bianco, V. Bucciarelli, E. Ammirati, F. Musca, G. Tonti, M. Frigerio, R. De Caterina, S. Gallina (Chieti and Milan, IT)

Cardiac resynchronisation therapy acutely homogenises regional left ventricular myocardial workload: A non-invasive echocardiographic assessment 
P105

Echocardiographic evolution of mitral and tricuspid regurgitation in patients undergoing tavi. experience in a real world center. 
P106

Echocardiography, the ‘crystal ball’ of infective endocarditis management in rheumatic heart disease. 
P107

Myocardial changes in recreational marathon runners: a 3-layer speckle tracking echocardiography study 
P108
Exercise - the bad, the ugly or the good guy

Chairpersons: P. Lipiec (Lodz, PL); J. Hung (Boston, US)

Pulmonary transit of agitated saline in highly trained endurance athletes is related to increased exercise capacity, larger cardiac remodelling and lesser right ventricular fibrosis. P109


Normative reference values of right ventricular size and function in athlete's heart: a meta-analysis on 7546 athletes. P110

F. D'ascenzi, A. Pelliccia, M. Solari, P. Piu, F. Loliaco, F. Anselmi, S. Caselli, M. Focardi, M. Bonifazi, S. Mondillo (Siena and Rome, IT)

Exercise-induced pulmonary hypertension in systemic sclerosis P111

L. Gargani, A. Moreo, A. Fabbri, F. Casadei, F. Pieri, F. Mori, E. Bruschi, C. Bruni, B. De Chiara, O. Epis, M. Matusci Cerinic, A. Moggi Pignone, E. Bossone (Pisa, Milan, Florence and Salerno, IT)

Echocardiography can differentiate between athlete's heart and hypertrophic cardiomyopathy genotype positive with mild phenotype P112

L.G. Klaeboe, O.H. Lie, L.A. Dejgaard, K.H. Haugaa, T. Edvardsen (Oslo, NO)

Indices of obesity, cardiac remodeling and diastolic dysfunction: beyond the Body Mass Index P113

F. Antonini-Canterin, C. Di Nora, S. Poli, L. Sparacino, I. Cosei, A. Ravasel, B.A. Popescu (Motta di Livenza, Trieste and Sacile, IT; Bucharest, RO)

The decrease of two-dimensional speckle-tracking global longitudinal strain in strength elite athletes is reflected in electrocardiogram P114

M.N. Alekhin, O. Chumakova, O. Drobyazko, M. Isaeva, O. Himiy, E. Chelombitko, D. Zateyshchikov (Moscow, RU)

Benefits on cardiac function by exercise are reversed by aging: a tissue doppler population study P115

G. Joseph, P. Sogaard, G. Nielsen, T. Biering-Sorensen, P. Schnohr, J.S. Jensen, R. Mogelvang (Hjorring, Aalborg, Gentofte, Frederiksberg and Copenhagen, DK)

Effect of exercise training after acute myocardial infarction on diastolic and systolic function. Focus on tissue doppler. P116

The prognostic value from echocardiography

Chairpersons: P. Sogaard (Aalborg, DK); P. Caso (Naples, IT)

14:00 Panel of experts: 145
L. Gargani (Pisa, IT); K.H. Haugaa (Oslo, NO)

14:00 Prognostic value of speckle tracking echocardiography in patients with Chagas cardiomyopathy 146

14:09 Does global longitudinal strain predict the development of hypertrophic cardiomyopathy in sarcomere gene mutation carriers? 147

14:18 Echocardiography in prediction of life-threatening ventricular arrhythmia in patients with arrhythmogenic cardiomyopathy 148
O.H. Lie, C. Rootvelt, L.A. Dejgaard, I.S. Leren, T. Edvardsen, K.H. Haugaa (Oslo, NO)

14:27 Echocardiographic predictors of the cardiac resynchronization therapy efficiency in patients with congestive heart failure 149
D. Mrkaæ, E. Golukhova, T. Mashina, V. Dzhanketova (Moscow, RU)

14:36 Vendor specific cut-offs of post-systolic index to identify scarred myocardium 150
O. Mirea, E.D. Pagourelia, J. Duchenne, J. Bogaert, J.D. Thomas, L.P. Badano, J.U. Voigt (Craiova, RO; Leuven, BE; Chicago, US; Padua, IT)

14:45 The prognostic factors for left atrial Enlargement in Patients with Sinus Rhythm and Atrial Fibrillation 151
A. Matsumoto, A. Goda, M. Fukui, K. Masai, Y. Soyama, M. Asakura, T. Masuyama (Nishinomiya, JP)

14:54 Derivation and validation of a novel prognostication model for patients with stress cardiomyopathy 152
M. Subramanian, G. Muthu, H. Ahamed, N. Matthew (Kochi and Chennai, IN)

15:03 Apical right ventricular strain and right atrial strain are the most significant predictors of acute and chronic right ventricular failure in patients referred to Left Ventricular Assist Devices. 153

15:12 The role of left bundle branch in patients with dilated cardiomyopathy and mildly to moderately reduced left ventricular function 154
P. Gentile, M. Merlo, A. Paldino, A. Cannata, G. Barbati, M. Bobbo, M. Gigli, D. Stolfo, B. Pinamonti, G. Sinagra (Trieste, IT)

15:21 Dilated cardiomyopathy with midrange ejection fraction at diagnosis: characterization and natural history 155
P. Gentile, M. Merlo, M. Bobbo, B. Pinamonti, G. Barbati, F. Ramani, M. Gigli, D. Stolfo, G. Sinagra (Trieste, IT)

Focus on heart valve disease

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

14:00 Presenters: 156
S. Mihaila (Bucuresti, RO); R. E. Dulgheru (Liege, BE)

15:30 - 16:00 How-to Session PORTO

How to prepare EACVI echo certification exam

EACVI HIT (Heart Imagers of Tomorrow)

Chairperson: A. Patrianakos (Heraklion, GR)

How-to session provides practical details and tools or tips and tricks on a specific topic related to the research. These sessions are built to help attendees to improve their experiences to complete successfully research project: from founding and grant application, to data analysis, results presentation and publication.

15:30 Presenter: 166
L. Gargani (Pisa, IT)
16:00 - 17:30 Special Event

**Inaugural session**

Chairpersons: B.A. Popescu (Bucharest, RO); T. Edvardsen (Oslo, NO)

Welcome Address by the EACVI President.
B.A. Popescu (Bucharest, RO)

ESC Presidential Welcome.
J.J. Bax (Leiden, NL)

Welcome Address by the Local Hosts.
N. Cardim (Lisbon, PT); A.M.G. Almeida (Lisbon, PT)

Introduction of the Edler Lecture presenter.
B.A. Popescu (Bucharest, RO)

**Edler lecture**
“Recognizing the elephant in the room. Quality control in imaging”.
T.H. Marwick (Melbourne, AU)

**Presentation of Edler Diploma.**
T. Edvardsen (Oslo, NO)

Presentation of the Nominated Honorary Member.
B.A. Popescu (Bucharest, RO); T. Edvardsen (Oslo, NO)

**EACVI Research and Training Grant Winners.**
V. Delgado (Leiden, NL); D. Muraru (Padua, IT)

**EACVI Echo section: programme highlights in echo.**
E. Donal (Rennes, FR)

**EACVI CMR section: programme highlights in CMR.**
C. Bucciarelli-Ducci (Bristol, GB)

**EACVI Nuclear and CT section: programme highlights in Nuclear/CT.**
O. Gaemperli (Zurich, CH)

**Opening Address.**
B.A. Popescu (Bucharest, RO)
Wednesday Posters
HIT MODERATED POSTER SESSION
All posters are on display from 09:00 to 16:00.
12:45 - 13:45 - Meet the presenters by their poster.

HIT POSTER SESSION
All posters are on display from 09:00 to 16:00.
12:45 - 13:45 - Lunchtime HIT Poster hosts.
Meet the presenters by their poster.

ABSTRACT MODERATED POSTER SESSION
All moderated posters are on display from 09:00 to 16:00.
12:45 - 13:45 - Meet the presenters by their poster.

CLINICAL CASE POSTER SESSION
All posters are on display from 09:00 to 16:00.
12:45 - 13:45 - Meet the presenters by their poster.

ABSTRACT POSTER SESSION
All posters are on display from 09:00 to 16:00.
12:45 - 13:45 - Meet the presenters by their poster.

HIGH SCORE POSTER
Look out for these abstracts acknowledged by the reviewing committee.

Missed a presentation?
After the congress, abstracts will be available online and a selection of slide presentations will be available only to EACVI Members.
More information on the ESC-EACVI Stand.

IMPORTANT INFORMATION FOR PRESENTERS
Poster presenters must set up poster between 08:30 - 09:00.
All posters not affixed by 12:45 may be considered as no-show.
Posters must be removed from the area between 16:00-16:30.

Abstract presenters can consult the POSTER ASSISTANCE DESK for further information and to retrieve their Certificate of Presentation.
Pocket echocardiography in the hands of medical students - is it the stethoscope of the future?  
M. Kacprzak, K. Sadowski, P. Skoczylas, F. Sucheta, O. Brycht, S. Latkowska, M. Kepka, M. Zielinska (Łódź, PL)

Clinical and prognostic impact of different methods and abnormality thresholds used for the quantification of left atrial volume by two-dimensional echocardiography  
E. Surkova, J. Bidviene, A. Niero, D. Cherata, P. Aruta, E. Secco, H. Rodriguez-Zanella, S. Iliceto, L.P. Badano, D. Muraru (Padua, IT; Kaunas, LT; Craiova, RO; Mexico City, MX)

Validation of six-minute walking distance in predicting left ventricular filling pressure in chronic heart failure population in Malaysia  
H.A. Zainal Abidin, M.Z. Zainal Abidin, M.F. Aminuddin, H.A. Ahmad Ainuddin, D. Katiman (Sungai Buloh and Puncak Alam, AM, MY)

Is there a gender difference in survival after cardiac resynchronization therapy?  

Long term atrial fibrillation in patients with systolic heart failure results in impairment of right ventricular function, with no influence of VVI pacing and cardiac resynchronisation.  
E. Majos, A. Kraska, I. Kowalik, E. Smolis-Bak, H. Szwed, R. Dabrowski (Warsaw, PL)

Calcium score-first investigational approach for stable chest pain: a 2-year outcome study in an asian population cohort  

Very severe aortic stenosis: is there a price to pay for late treatment?  

Evaluation of left atrial strain in patients with rheumatic mitral stenosis  
F.A. Castro, O. Azevedo, M. Lourenco, B. Faria, I. Oliveira, A. Lourenco (Guimarães, PT)

Anatomy of the human mitral valve - morphological variability of the mitral valve leaflets  
A. Krawczyk-Ozog, M.K. Holda, M. Koziej, D. Sorysz, Z. Siudak, D. Dudek, W. Klimek-Piotrowska (Krakow, PL)

Comparison of left atrial phasic function in hypertrophic cardiomyopathy versus systemic hypertension  
A. Borizanova-Petkova, E. Kinova, A. Goudev (Sofia, BG)

Prognostic value of collagen biomarkers on left atrial remodeling and arrhythmia on hypertrophic cardiomyopathy  
A. Zaroui, M. Boukhris, M. Asmi, R. Mechmeche (Tunis, TN)

The differential effects of a short term aerobic or resistance physical exercise protocol in the improvement of endothelial function and cardiovascular efficiency in women after breast-cancer surgery  

Impact of sleeve gastrectomy on epicardial fat tissue and carotid intima media thickness  
C. Altin, V. Erol, A. Aydin, M. Yilmaz, L.E. Sade, H. Gulay, H. Muderresolgu (Izmir, Adana and Ankara, TR)

Dependence of myocardial deformation from the hemodynamic and structural parameters of the left ventricle in healthy subjects  
V. Oleinikov, V. Galimskaya, S. Kupriyanova, N. Burko (Penza, RU)
### Wednesday 6 December 2017 - Posters

**Clinical Case Poster session 1**

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<thead>
<tr>
<th>Clinical Case</th>
<th>Poster Number</th>
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<tbody>
<tr>
<td>Cardiac manifestation of tuberous sclerosis complex</td>
<td>P182</td>
</tr>
<tr>
<td>E. Bertella (Polaveno, IT)</td>
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<tr>
<td>Cardiac tumor in a 15-year-old patient</td>
<td>P183</td>
</tr>
<tr>
<td>A. Sghaier (Sousse, TN)</td>
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<tr>
<td>A large periaortic cavernous haemangioma imitating an aortic intramural hematoma.</td>
<td>P184</td>
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<tr>
<td>T. Plonek (Wroclaw, PL)</td>
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<td>Mitro-aortic curtain cavity: a multimodality imaging approach for the differential diagnosis.</td>
<td>P185</td>
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<tr>
<td>C.C. Capogrosso (Naples, IT)</td>
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<tr>
<td>Left ventricular ‘pom-pom’ - when the 3D-echo is the cheerleader</td>
<td>P186</td>
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<tr>
<td>J. Riqueira (Lisbon, PT)</td>
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<tr>
<td>Calcified mass in superior vena cava in relation to a central venous line and calcium infusion.</td>
<td>P187</td>
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<tr>
<td>R. Pinto (Matosinhos, PT)</td>
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<tr>
<td>A large cardiac metastasis of parathyroid tumour presenting with ventricular tachycardia</td>
<td>P188</td>
</tr>
<tr>
<td>R. Ilhao Moreira (Coimbra, PT)</td>
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<tr>
<td>Successful treatment of acute massive pulmonary embolism in a patient with isolated dextroversion and great saphenous vein thrombus propagating into the femoral vein</td>
<td>P189</td>
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<tr>
<td>A. Nossikoff (Sofia, BG)</td>
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<tr>
<td>Anomalous origin of right coronary artery from pulmonary artery (arcapa), masked by a common cardiac defect</td>
<td>P190</td>
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<tr>
<td>Y.M. Sedky (Cairo, EG)</td>
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<tr>
<td>A dreadful consequence of an uncommon suspect: papillary muscle rupture following aortic valve endocarditis</td>
<td>P191</td>
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<tr>
<td>A. Felix-Oliveira (Torres Novas, PT)</td>
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<tr>
<td>Acute coronary syndrome and stroke in a young woman</td>
<td>P192</td>
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<tr>
<td>T.V. Naiden (St. Petersburg, RU)</td>
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<tr>
<td>Thinking out of the box in an unusual evolution of a STEMI case</td>
<td>P193</td>
</tr>
<tr>
<td>F. Goanta (Timisoara, RO)</td>
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<tr>
<td>Worsened mitral tethering and secondary mitral regurgitation due to acute myocardial infarction occurred in a patient with severe aortic stenosis</td>
<td>P194</td>
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<tr>
<td>S. Nishino (Miyazaki, JP)</td>
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<tr>
<td>Postischemic exercise-induced mitral regurgitation not due to inducible ischemia</td>
<td>P195</td>
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A stroke in the puerperium, a puzzle to solve.
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A rare cause of constrictive pericarditis
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Pericardial mass - it is not always what it seems
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Asymptomatic systolic murmur unveiling a rare and complex cardiovascular anomaly
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Persistent desaturation in an elderly man with pneumonia
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A rare cause of heart failure: ruptured sinus of Valsalva aneurysm
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A strange case of abdominal pain
J. Ponte Monteiro (Braga, PT)

A rare case of anomalous origin of left and right coronary arteries from a single ostium in a patient with bicuspid aortic valve: a multimodality imaging approach
S. Bonapace (Verona, IT)
The imaging examination and quality assessment

Right ventricular free wall thickness measured by echocardiography versus cardiac magnetic resonance imaging.  C. Wong, M.M.Y. Lee, N.E.R. Goodfield (Glasgow, GB)

The inferior vena cava, not just a homogenous tube but a complex structure which may hold useful information when interpreted correctly.  R.M. Murphy, M.B. Barrett, K.M.C.D. Mcdonald (Dublin, IE)

Brain lesions and cognitive impairment in neurologically asymptomatic patients undergoing pulmonary vein isolation - long term observation  J. Wieczorek, K. Mizia-Stec, P. Wieczorek, M. Wybraniec, A. Wnuk-Wojnar, A. Lasek-Bal (Katowice, PL)

Low contrast CT angiography prior to TAVI procedure: feasibility and diagnostic accuracy for coronary tree  A. Annoni, M.E. Mancini, A. Formenti, M. Verdeccia, G. Pontone, M. Muguie, M. Trabattoni, M. Muratori, L. Fusini, S. Ghulam Ali, A. Baggio, A.N.A. Coutinho Santos, M. Pepi, D. Andreini (Milan, IT; Lisbon, PT)

Assessment of morphology and function

The impact of aging on left atrial size and function: a systematic review and meta-analysis  F.D. ascenzi, P. Piu, V. Capone, C. Sciaccaluga, M. Solari, M. Cameli, M. Focardi, S. Mondillo, M. Henein (Siena, IT; Umea, SE)

The relation between blood pressure components and left atrial volume in the context of left ventricular mass index  M. Rojek, M. Rajzer, W. Wojciechowska, J. Gasowski, T. Pizon, D. Czarnecka (Krakow, PL)

Increased left atrial volume predicts atrial fibrillation recurrence after electrical cardioversion: a systematic review and meta-analysis  P. Ibrahimi, G. Bajraktari, I. Bytyci, F. Jashari, M.Y. Henein (Prishtina, XK; Umea, SE)

Left atrial enlargement as a supportive marker of atherosclerosis  C. Maffeis, G. Benfari, A. Rossi, C. Vassanelli (Verona, IT)

Can simple linear and areal dimensions be used to calculate the total left ventricular myocardial mass adequately?  - A cardiovascular magnetic resonance study  C.L. Polte, A. Abusaif, S.A. Gao, O. Bech-Hanssen (Gothenburg, SE)


Clinical significance and prognostic value of L wave in heart failure patients  K. Masai (Nishinomiya, JP)

A novel simplified method to estimate global longitudinal strain in oncology patients with difficult acoustic windows  N. Kholof, F. Alghamdi, R. Paakkonen, M. Chow, D. Galzerano, E. Pituskin, I. Paterson, J.B. Chow, H. Becher (Riyadh, SA; Edmonton, CA; Helsinki, FI)

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Phenotyping heart failure with mid-range vs preserved ejection fraction by functional assessment with exercise gas exchange and echocardiography  M. Barletta, F. Bandera, M. Guazzi (San Donato Milanese, IT)

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Atrial function after running and swimming races: different impact on atrial performance of two endurance disciplines

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Proposal of two new parameters to assess myocardial function from ventricular 2D strain.
J.A. Lowenstein, V. Mora Liabata, E. Romero Dorta, P. Aguar Carrascosa, A. Sauri Ortiz, J. Bertolín Boronat, D. Romero, M. Rodriguez Israel, N. Ugalde Gallegos, I. Roldan Torres (Buenos Aires, AR; Valencia, ES)

Acute cellular rejection in heart transplant recipients: impact in left ventricle myocardial strain assessed by means of velocity vector imaging echocardiography.

Usefulness of left atrial strain in predicting elevated left ventricular filling pressure in ischemic cardiomyopathy.

Isolated ventricular block and atrial remodelling assessed using speckle tracking echocardiography.

Global longitudinal strain variation by leg lifting maneuver: a new methodology to evaluate LV functional reserve.

Only young females, less than 50 years old, have better two dimensional echocardiographic strains than young males.

Early changes in myocardial deformation detected by three-dimensional speckle tracking echocardiography in patients treated with anthracyclines.

Assessment of right ventricular function in asymptomatic type 1 diabetic children.
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M. Shehata, E. Surkova, R. Bellu, F. Sambugaro, F. Migliore, H. Shehata, A. Abu Elhoda, E. El Sharkawy, M. Nawar, S. Iliceto, L.P. Badano (Alexandria, EG; Samara, RU; Padua, IT)

Left atrial deformation predicts paroxysmal atrial fibrillation in patients with chronic renal failure.

Two-dimensional longitudinal strain during dobutamine stress echocardiography for the detection of myocardial ischemia in patients with previous percutaneous intervention.

Evaluation of left ventricular function using myocardial deformation imaging in HIV patients.
R. Domingues, O. Azavedo, M. Lourenco, F. Castro, A. Lourenco (Braga and Guimaraes, PT)

Assessment of right atrial and right ventricular function using 2D speckle-tracking imaging in pulmonary hypertension.
M. Kazańca-Wiatr, A. Lenart, M. Olszowska, P. Podolec (Krakow, PL)

Evaluation of LA function in HTN patients with normal LA size by TDI.
A.Y.A. Dawoud (Ismailia, EG)

Morpho-functional cardiovascular adaptation in hypertensive patients: two-dimensional speckle - tracking echocardiographic study.
C. Di Benedetto, F.A. Atanasio, V. Losi, S. Licciardi, C. Tamburino, I.P. Monte (Catania, IT)

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Echocardiographic assessment by global longitudinal strain in renal transplant recipients.

The ratio of trans-mitral inflow velocity to tissue doppler velocity (E/E') as a prognostic marker of sacubitril/valsartan treatment response in heart failure with reduced ejection fraction.
E. Nakou, M. Marketou, F. Parthenakis, A. Patrianakos, A. Zacharakis, G. Mpantouvakis, K. Nakos, P. Vardas (Heraklion, GR)

Quantitative myocardial perfusion and gated left ventricular measurements from 82Rb PET/CT assessed by different commercial software packages.
J.B. Oliveira, Y. Min, K. Wechalekar (London, GB)
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Thursday Sessions
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**09:00 - 10:30**

**Cardiac chamber quantification - According to the guidelines**

Chairperson: F. Knebel (Berlin, DE)

This workshop will focus on the current recommendations for chamber quantification. We will discuss the minimum requirements for a standard transthoracic echo exam: planes, loops, quality requirements. The current normal values for the most important measurements will be highlighted.

The second part will focus on the methods for quantification of LV systolic function. The advantages and limitations of speckle tracking will be presented.

In addition, the role of 3D echo will be reviewed critically. There will be enough room for interaction and discussion.

**11:00 - 12:30**

**Basic to advanced image analysis and quantification in echocardiography - Including speckle-tracking**

Chairperson: T. Binder (Vienna, AT)

The objective of this session during the Imaging Campus will be to present standardized examination protocol to broadly assess cardiac performance in adult population by advancing conventional echocardiography imaging and measurements with modern speckle-tracking analyses. This allows accurate detection of changes in cardiac performance and further enables highly sensitive assessment of regional myocardial motion and deformation in high spatio-temporal resolution. For the last few years, a task force led by the ASE and the EACVI has been working to standardize the strain measurement method and results among vendors with the goal of reducing variability. This updates will be respected and implemented in this course as well. Further advanced 3D applications will be introduced.

**14:00 - 15:30**

**Cardiac chamber quantification - According to the guidelines**

Chairperson: F. Knebel (Berlin, DE)

This workshop will focus on the current recommendations for chamber quantification. We will discuss the minimum requirements for a standard transthoracic echo exam: planes, loops, quality requirements. The current normal values for the most important measurements will be highlighted.

The second part will focus on the methods for quantification of LV systolic function. The advantages and limitations of speckle tracking will be presented.

In addition, the role of 3D echo will be reviewed critically. There will be enough room for interaction and discussion.

**16:00 - 17:30**

**Basic to advanced image analysis and quantification in echocardiography - Including speckle-tracking**

Chairperson: T. Binder (Vienna, AT)

The objective of this session during the Imaging Campus will be to present standardized examination protocol to broadly assess cardiac performance in adult population by advancing conventional echocardiography imaging and measurements with modern speckle-tracking analyses. This allows accurate detection of changes in cardiac performance and further enables highly sensitive assessment of regional myocardial motion and deformation in high spatio-temporal resolution. For the last few years, a task force led by the ASE and the EACVI has been working to standardize the strain measurement method and results among vendors with the goal of reducing variability. This updates will be respected and implemented in this course as well. Further advanced 3D applications will be introduced.
**Thursday 7 December 2017 - Morning Sessions**

**Sponsored by GE Healthcare**

09:00 - 10:30

**Exploring new myocardial strain imaging techniques and quantitative analysis of right ventricle - Myocardial strain imaging for the early detection of myocardial damage in patients with cardiomyopathy, myocarditis and oncological diseases**

Chairperson: A. Hagendorff (Leipzig, DE)

**Learning objectives:**
Learning how myocardial strain imaging may help in the early detection of myocardial damage in specific group of patients.
Direct interaction with the lecturer will help you to become familiar with the relevant parameters to describe the specific topic.

11:00 - 12:30

**Exploring new myocardial strain imaging techniques and quantitative analysis of right ventricle - Quantitative analysis of Right Ventricular geometry and function.**

Chairperson: L.P. Badano (Padova, IT)

**Learning objectives:**
Understanding right ventricular geometry and function by quantifying 4D echo volume datasets.
Direct interaction with the lecturer will help you to become familiar with the relevant parameters to describe the specific topic.

14:00 - 15:30

**Exploring new myocardial strain imaging techniques and quantitative analysis of right ventricle - Quantitative analysis of Right Ventricular geometry and function.**

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Co-Sponsored by Abbott/Philips

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Chairperson</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 - 10:00</td>
<td>The gold standard for TEE assessment before, during, and after LAA occlusion</td>
<td>M.J. Swaans (Hedel, NL)</td>
</tr>
<tr>
<td>10:30 - 11:30</td>
<td>The gold standard for TEE assessment before, during, and after LAA occlusion</td>
<td>M.J. Swaans (Hedel, NL)</td>
</tr>
<tr>
<td>12:00 - 13:00</td>
<td>Understanding the Echo guidance for Percutaneous Mitral Valve Repair patients screening and procedure.</td>
<td>P. Biaggi (Zurich, CH)</td>
</tr>
<tr>
<td>14:00 - 15:00</td>
<td>Understanding the Echo guidance for Percutaneous Mitral Valve Repair patients screening and procedure.</td>
<td>P. Biaggi (Zurich, CH)</td>
</tr>
<tr>
<td>15:30 - 16:30</td>
<td>Understanding the Echo guidance for Percutaneous Mitral Valve Repair patients screening and procedure.</td>
<td>P. Biaggi (Zurich, CH)</td>
</tr>
<tr>
<td>17:00 - 18:00</td>
<td>Understanding the Echo guidance for Percutaneous Mitral Valve Repair patients screening and procedure.</td>
<td>M.J. Swaans (Hedel, NL)</td>
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</tbody>
</table>
### Imaging in the electrophysiology lab

**Chairpersons: B. Bijnens (Barcelona, ES); G. Pressman Philadelphia, US**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker</th>
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</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Atrial fibrillation ablation: what we need to know before and after procedure.</td>
<td>M. Sitges (Barcelona, ES)</td>
<td>LISBOA</td>
</tr>
<tr>
<td>08:52</td>
<td>LA appendage occlusion: how we care?</td>
<td>V. Rigolin (Chicago, US)</td>
<td></td>
</tr>
<tr>
<td>09:15</td>
<td>Imaging ventricular arrhythmias: a multimodality approach.</td>
<td>A. Gimelli (Pisa, IT)</td>
<td></td>
</tr>
<tr>
<td>09:37</td>
<td>Ventricular arrhythmia ablation: what we need to know before and after procedure.</td>
<td>P. Sogaard (Aalborg, DK)</td>
<td></td>
</tr>
</tbody>
</table>

### Advances in ischemic heart disease: read with the experts

**Chairpersons: D. Neglia (Pisa, IT); F. Flachskampf (Uppsala, SE)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
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<th>Location</th>
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<tbody>
<tr>
<td>08:30</td>
<td>Implementing guidelines and recommendations into clinical practice.</td>
<td>M.J. Antunes (Coimbra, PT)</td>
<td>PORTO</td>
</tr>
<tr>
<td>08:52</td>
<td>Imaging in the non invasive assessment of coronary lesions.</td>
<td>O. Gaemperli (Zurich, CH)</td>
<td></td>
</tr>
<tr>
<td>09:15</td>
<td>Imaging in the assessment of myocardial viability.</td>
<td>N. Bettencourt de Sousa (Porto, PT)</td>
<td></td>
</tr>
<tr>
<td>09:37</td>
<td>Dyslipidemia control - much more beyond statins.</td>
<td>D. Vinereanu (Bucharest, RO)</td>
<td></td>
</tr>
</tbody>
</table>

### Clinical use of 2D Speckle Tracking - Hopes and Facts

**Chairpersons: G.A. Derumeaux (Creteil, FR); J.D. Thomas (Chicago, US)**

<table>
<thead>
<tr>
<th>Time</th>
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<tr>
<td>08:30</td>
<td>Lessons from the EACVI/ASE/Industry Inter-Vendor Study - Are all vendors equal?</td>
<td>J.U. Voigt (Leuven, BE)</td>
<td>FARO</td>
</tr>
<tr>
<td>08:52</td>
<td>Assessment of layer strain - Does the concept hold true?</td>
<td>N. Ohte (Nagoya, JP)</td>
<td></td>
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<tr>
<td>09:15</td>
<td>Right ventricular strain - Better than classical parameters?</td>
<td>L. Badano (Padova, IT)</td>
<td></td>
</tr>
<tr>
<td>09:37</td>
<td>Clinical evidence matters - When and how to use 2D speckle tracking today?</td>
<td>T.H. Marwick (Melbourne, AU)</td>
<td></td>
</tr>
</tbody>
</table>

### Basics of cardiac ultrasound

**Chairpersons: L. Gargani (Pisa, IT); M. Henein (Umea, SE)**

Teaching courses are specifically dedicated to an audience aiming to improve its knowledge and understanding and perfect its skills in a main topic of the Core curriculum of the EACVI.

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<th>Time</th>
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<tr>
<td>08:30</td>
<td>Physics, instrumentation and machine settings.</td>
<td>A. Hagendorff (Leipzig, DE)</td>
<td>COIMBRA</td>
</tr>
<tr>
<td>08:52</td>
<td>The complete standard echo study.</td>
<td>A.A. Zacharaki (Heraklion, GR)</td>
<td></td>
</tr>
<tr>
<td>09:15</td>
<td>Common mistakes and pitfalls: how to avoid them.</td>
<td>K.F. Fox (London, GB)</td>
<td></td>
</tr>
<tr>
<td>09:37</td>
<td>Facts or artifacts in 2D-Doppler echocardiography.</td>
<td>P.M. Vandervoort (Genk, BE)</td>
<td></td>
</tr>
</tbody>
</table>
Thursday 7 December 2017 - Morning Sessions

08:30 - 10:00 Symposium EVORA

Cardiotoxicity in oncology: not only heart failure
Joint session with the Italian Society of Echocardiography and Cardiovascular Imaging (SIECVI)

Chairpersons: N. Cardim (Lisbon, PT); M. Galderisi (Naples, IT)

08:30 Which drugs causes cardiotoxicity and how do we diagnose. 355
I.P. Monte (S. Gregorio, IT)

08:52 Can we still use ejection fraction for guiding oncologic therapy? 356
J.C. Plana (Houston, US)

09:15 Biomarkers and cardiac imaging for detection of cardiotoxicity: the right balance. 357
C. Cadeddu Dessalvi (Monserrato, IT)

09:37 ESC guidelines on cancer therapy and cardiotoxicity: the place of cardiac imaging. 358
J.L. Zamorano Gomez (Madrid, ES)

08:30 - 10:00 Symposium GUIMARAES

Heart failure: imaging matters
Session in collaboration with the Heart Failure Association (HFA of the ESC)

Chairpersons: F.J. Pinto (Lisbon, PT); E. Donal (Rennes, FR)

08:30 Incorporating guidelines and recommendations into clinical practice. 359
R. Fontes Carvalho (Porto, PT)

08:52 Systolic function in 2018: it’s really about twisting and deformation. 360
B.L.M. Gerber (Woluwe-St. Lambert, BE)

09:15 Diastolic function in 2018: it’s really about suction and relaxation. 361
B.A. Popescu (Bucharest, RO)

09:37 Advances in pharmacological treatment. 362
S.D. Anker (Berlin, DE)

08:30 - 10:00 Symposium GUARDA

Where clinicians and engineers look into the future

Chairpersons: J. D’hoooge (Leuven, BE); A. Hernandez (Rennes, FR)

08:30 High frame rate imaging: technique and applications. 363
H. Vos (Rotterdam, NL)

08:52 Clinical value of high frame rate imaging. 364
M. Strachinaru (Rotterdam, NL)

09:15 3D printing: technique and applications. 365
I.V. Valverde Perez (Seville, ES)

09:37 3D printing of AV valves: its clinical value. 366
O. Pappalardo (Milan, IT)

08:30 - 10:00 Rapid Fire Abstract AGORA

The additional role of Nuclear Cardiology/Computed Tomography imaging in difficult patients

Chairpersons: P. Knaapen (Amsterdam, NL); A.J.H.A. Scholte (Leiden, NL)

08:30 Panel of experts: 367
E. Reyes (London, GB); A. Saraste (Turku, FI)

08:30 Stress computed tomographic perfusion improve diagnostic accuracy of coronary computed tomographic angiography in intermediate to high risk patients for coronary artery disease 368
### Rapid Fire Abstract

**The additional role of Nuclear Cardiology/Computed Tomography imaging in difficult patients (continued)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
<th>Authors</th>
</tr>
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<tr>
<td>08:39</td>
<td><strong>Diagnostic value of 99mTc-HMPAO-labeled leukocyte SPECT/CT and transthoracic</strong>&lt;br&gt;<strong>echocardiography in infective endocarditis</strong></td>
<td>K. Holcman, M. Kostkiewicz, W. Szot, S. Wisniowska-Smialek, P. Rubis, A. Lesniak-Sobelga, M. Hlawaty, P. Podolec (Kraków, PL)</td>
</tr>
<tr>
<td>08:57</td>
<td><strong>Radiomics can identify napkin-ring plaques on coronary CT angiography images</strong></td>
<td>M. Kolossvary, J. Karady, B. Szilveszter, P. Kitslaar, B. Merkely, P. Maurovich-Horvat (Budapest, HU; Leiden, NL)</td>
</tr>
<tr>
<td>09:15</td>
<td><strong>The additional role of nuclear imaging techniques in the diagnosis of infective endocarditis.</strong></td>
<td>F. Panzeri, M.C. Ferrara, A. Moreo, B. De Chiara, F. Musca, F. Casadei, O. Belli, F. Spano', G. Santambrogio, C. Giannattasio (Milan, IT)</td>
</tr>
<tr>
<td>09:33</td>
<td><strong>Left ventricular mechanical dyssynchrony as assessed by quantitative gated SPECT in patients with left ventricular systolic dysfunction</strong></td>
<td>Y. Mahmoud, M. Rayan, M. Rabea, S. Eldemerdash (Cairo, EG)</td>
</tr>
<tr>
<td>09:42</td>
<td><strong>Familial combined hyperlipidaemia shows increased vascular inflammation compared to heterozygous familial hypercholesterolaemia: insights from an in vivo imaging study.</strong></td>
<td>G. Benetos, K. Toutouzas, I. Koutagiar, J. Skoumas, N. Planou, A. Antonopoulos, A. Georgakopoulos, P. Kafouris, G. Spyrou, C. Aggeli, D. Cokkinos, D. Tousoulis, C.D. Anagnostopoulos (Athens, GR)</td>
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**Focus on critical patient in CCU**

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

<table>
<thead>
<tr>
<th>Time</th>
<th>Workshop</th>
<th>Presenters</th>
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<tr>
<td>08:30</td>
<td><strong>TOE Room</strong></td>
<td>H. Skinner (Nottingham, GB); S. Gianstefani (Pesaro, IT)</td>
</tr>
</tbody>
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Thursday 7 December 2017 - Morning Sessions

10:00 - 11:00 Abstract Session AGORA

**Young Investigator Award session - Basic Science**

**Chairpersons**: T. Edvardsen (Oslo, NO); B. Cosyns (Brussels, BE)

**Judges**: J.U. Voigt (Leuven, BE); V. Delgado (Leiden, NL); D. Neqlia (Pisa, IT); G. Di Salvo (London, GB); B.L.M. Gerber (Woluwe-St. Lambert, BE)

The abstract will be presented in one of the Young Investigator Award Sessions.
- 4 oral presentations will be held during the session.
- Sessions will be chaired by senior faculty members and presentations evaluated by a panel of renowned judges.
- Each presenter has 15 minutes to present the research.
- The powerpoint presentation should not exceed 10 minutes to allow for 5 minutes question-and answer period with the Chairpersons and the Judges.
- The presenter will be evaluated on: Originality, Scientific content and Presentation

**10:00** The development of the fetal myocardium: the impact of fiber orientation on the left ventricular diastolic compliance 379

**10:15** Negative crosstalk between left ventricular lateral wall and septum in left bundle branch block: «the lateral wall paradox» 380

**10:30** Left ventricular mechanical dispersion measured with two-dimensional speckle tracking echocardiography predicts severe arrhythmic events in patients with ischemic and non-ischemic cardiomyopathy. 381

**10:45** Prevalence of ascending thoracic aortic dilatations based upon absolute and individual predicted normal aortic size measured by CT and echocardiography. A substudy from the DANCAVAS trial 382

10:00 - 11:00 Moderated Posters MODERATED POSTER AREA

**Clinical cases moderated - The nightmare of aortic syndromes: be prepared to survive**

**Chairpersons**: A. Evangelista Masip (Barcelona, ES); F. Antonini-Canterin (Pordenone, IT)

- Re-dissection of a previous type A aortic dissection treated with endovascular repair. P383
  M.B. Castro Verdes (A Coruna, ES)
- Slight back pain, large abdominal mass P384
  I. Aguiar Ricardo (Lisbon, PT)
- Aortic intramural haematoma - a specific form of acute aortic syndrome P385
  M.A. Zurawska (Warszawa, PL)
- Voluminous ascending aortic pseudoaneurysm compressing the right pulmonary artery: unusual cause of cough and dyspnea P386
  M. Kozel (Prague, CZ)
- The long road home following spontaneous coronary artery dissection via veno-arterial extracorporeal membrane oxygenation: guided by transoesophageal echocardiography P387
  R. Fisher (London, GB)
- A 32-year-old man with acute onset pain in the chest P388
  I.H. Tai (Kaohsiung, TW)

10:10 - 10:50 Special Session LISBOA

**Cardiac Imaging Quiz 1 (Echocardiography) - Solving great mysteries in cardiac imaging**

**Chairpersons**: J.L. Zamorano Gomez (Madrid, ES); P. Nihoyannopoulos (London, UK)

- Mobile App interactive session. 389
- Mysterious cases in transthoracic echocardiography. 390
  R. Fontes Carvalho (Porto, PT)
- Diagnostic conundrums in transesophageal echo. 390
  L. Badano (Padova, IT)
### Thursday 7 December 2017 - Morning Sessions

#### 10:10 - 10:55 How-to Session

**How to analyze a CMR exam - Tips for beginners**  
*EACVI HIT (Heart Imagers of Tomorrow)*

**Chairperson:** S. Moharem-Elqamal (Cairo, EG)

*How-to session provides practical details and tools or tips and tricks on a specific topic related to the research. These sessions are built to help attendees to improve their experiences to complete successfully research project: from founding and grant application, to data analysis, results presentation and publication.*

- **10:10**  
  **Presenter:** C. Bucciarelli-Ducci (Bristol, GB)

#### 11:00 - 12:30 Main Session

**How to use cardiac imaging to discover early heart failure in cardiomyopathies?**  
*Mobile App - Vote and Ask a Question*

**Chairpersons:** E. Plonska-Gosciniak (Szczecin, PL); N. Weissman (Washington, US)

- **11:00**  
  **Mobile App Interactive Session.**
- **11:00**  
  **Hypertrophic cardiomyopathy.**  
  N. Cardim (Lisbon, PT)
- **11:22**  
  **Dilated cardiomyopathy.**  
  E. Donal (Rennes, FR)
- **11:45**  
  **Arrhythmogenic cardiomyopathy.**  
  K.H. Haugaa (Oslo, NO)
- **12:07**  
  **Non-compaction cardiomyopathy.**  
  M. Cikes (Zagreb, HR)

#### 11:00 - 12:30 Clinical Imaging

**Imaging native and prosthetic valves: become a master**

**Chairpersons:** B. Chambers (London, GB); M. Pepi (Milan, IT)

- **11:00**  
  **What do the 2017 ESC guidelines say.**  
  L. Ernande (Paris, FR)
- **11:22**  
  **The EACVI approach on the assessment of valvular prostheses.**  
  P. Pibarot (Quebec, CA)
- **11:45**  
  **Prosthetic valves and devices endocarditis.**  
  G. Habib (Marseille, FR)
- **12:07**  
  **Percutaneous valves and devices: what’s new?**  
  J.L. Cavalcante (Pittsburgh, US)

#### 11:00 - 12:30 Debate Session

**Is advanced assessment of LV function ready for prime time?**

**Chairpersons:** W. Jaber (Cleveland, US); G. Karatasakis (Athens, GR)

- **11:00**  
  **Strain parameters are useful in the daily practice. PRO.**  
  T.H. Marwick (Melbourne, AU)
- **11:22**  
  **Strain parameters are not ready for clinical decision making in the single patient. CON.**  
  F. Flachskampf (Uppsala, SE)
- **11:45**  
  **LV fibrosis assessment using CMR: useful in the daily practice.PRO.**  
  V. Maestrini (Roma, IT)
- **12:07**  
  **LV fibrosis assessment using CMR: not ready for clinical decision making in the single patient. CON**  
  M. Desai (Cleveland, US)
### 11:00 - 12:30 Teaching Course COIMBRA

#### Basics of 2D cardiac assessment

Chairpersons: R. Steeds (Birmingham, GB); P. Lipiec (Lodz, PL)

*Teaching courses are specifically dedicated to an audience aiming to improve its knowledge and understanding and perfect its skills in a main topic of the Core curriculum of the EACVI.*

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<td>11:00</td>
<td>Left ventricular size and systolic function.</td>
<td>A. Nossikoff (Sofia, BG)</td>
</tr>
<tr>
<td>11:22</td>
<td>Left ventricular diastolic function.</td>
<td>O.A. Smiseth (Oslo, NO)</td>
</tr>
<tr>
<td>11:45</td>
<td>Right ventricular size and function.</td>
<td>R.O. Jurcut (Bucharest, RO)</td>
</tr>
<tr>
<td>12:07</td>
<td>Atrial size and function.</td>
<td>L. Thomas (Sydney, AU)</td>
</tr>
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</table>

### 11:00 - 12:30 Symposium EVORA

#### The role of stress echocardiography in non-ischemic heart disease

*Joint session with the Korean Society of Echocardiography (KSE)*

Chairpersons: S.W. Park (Seoul, KR); R. Sicari (Pisa, IT)

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<tr>
<td>11:00</td>
<td>Valvular regurgitation.</td>
<td>G.R. Hong (Seoul, KR)</td>
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<tr>
<td>11:22</td>
<td>Valvular stenosis.</td>
<td>A. Theodosis (Athens, GR)</td>
</tr>
<tr>
<td>11:45</td>
<td>Cardiomyopathies.</td>
<td>F. Bandera (San Donato Milanese, IT)</td>
</tr>
<tr>
<td>12:07</td>
<td>Pulmonary arterial hypertension.</td>
<td>J.-W. Ha (Seoul, KR)</td>
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### 11:00 - 12:30 Symposium GUIMARAES

#### Echocardiography to guide interventions - case-based session

*Joint session with the Canadian Society of Echocardiography (CSE)*

Chairpersons: L. Rudski (Cote St Luc, CA); L.E. Sade (Ankara, TR)

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<tr>
<td>11:00</td>
<td>The evolving role of echocardiography for new interventions for structural heart diseases.</td>
<td>E. Agricola (Milan, IT)</td>
</tr>
<tr>
<td>11:22</td>
<td>Echocardiography for percutaneous valve repair.</td>
<td>A. Bernard (Tours, FR)</td>
</tr>
<tr>
<td>11:45</td>
<td>Plugging the left atrial appendage.</td>
<td>A. Basmadjian (Montreal, CA)</td>
</tr>
<tr>
<td>12:07</td>
<td>Echo in prosthetic valves: when it matters!</td>
<td>F. Tournoux (Montreal, CA)</td>
</tr>
</tbody>
</table>
11:00 - 12:30  Symposium  GUARDA

**Critical care echocardiography**  
EACVI HIT (Heart Imagers of Tomorrow)

Chairpersons: S. Mihaila (Bucuresti, RO); B.W. Michalski (Ksawerow, PL)

11:00  How to assess volume status by echo?  
H. Soliman (London, GB)  416

11:22  How to evaluate shock by echo?  
R.C. Vidal Perez (Lugo, ES)  417

11:45  Echo as a non-invasive Cath (CVP, PCWP).  
M. Cameli (Siena, IT)  418

12:07  Echocardiography in cardiac arrest.  
O. Tok (Istanbul, TR)  419

11:00 - 12:30  Clinical Cases  AGORA

**HIT the case!**  
EACVI HIT (Heart Imagers of Tomorrow)

Chairpersons: C. Sousa (Porto, PT); J.R. Lindner (Portland, US)

Young clinicians will present their cases and experts will be asked to moderate the sessions, facilitate interaction with the audience, prompt discussions, challenge the presenters and the audience.

*The main objective of the session is to learn from challenging clinical case scenarios*

11:00  Panel of experts:  
S. Loizos (Athens, GR); N. Kagiyama (Pittsburgh, US)  420

11:00  A complicated one segment myocardial disease: the rule of cardiovascular imaging  
A.R. Pereira (Almada, PT)  421

11:09  Transthoracic echocardiography for diagnosis of anomalous origin of the left descending coronary artery from the pulmonary artery in 64-year-old woman  
N.N. Gladkikh (Tomsk, RU)  422

11:18  A huge coronary artery fistula masquerading under atrial septal defect  
A. Mirdamamdi (Isfahan, IR)  423

11:27  An unexpected cause of pericarditis  
S. Cardoso Torres (Porto, PT)  424

11:36  Arrhythmic storm in a young man with atrio-ventricular block and a pacemaker. The additional role of Two-Dimensional Speckle-Tracking and Three-Dimensional Echocardiography to identify the diagnosis  
A. Niero (Dolo, IT)  425

11:45  Pseudoaneurysm, multimodality imaging and heart team: a rare and complex finding behind chest pain  
J. Sousa (Funchal, PT)  426

11:54  Left ventricular myocardial cleft in a patient with dilated cardiomyopathy, a challenging diagnosis with important prognostic implications  
A.M. Chitroceanu (Bucharest, RO)  427

12:03  Loeffler's endocarditis without peripheral hypereosinophilia  
P. Kogoj (Ljubljana, SI)  428

12:12  Left ventricular spontaneous echo contrast in a young patient with acute myocarditis complicated by cardioembolic stroke. When there's smoke there's fire?  
M. Previato (Noventa Padovana, IT)  429

12:21  Difficult diagnosis and special characteristics of mycobacterium chimaera endocarditis.  
R. Fernandez Galera (Vila Real, ES)  430
11:00 - 12:30  Workshop  TOE Room

Focus on prosthetic valves

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

11:00  Presenters:
   A.E. Freitas (Oeiras, PT); C.C. Beladan (Bucharest, RO)
### Satellite Symposium - PORTO

**Contrast echocardiography: clinical guidelines and evidences**

**Sponsored by Bracco**

**Chairperson:** T. Porter (Omaha Ne, US)

The objectives of the session are:
- To understand the current technical and quality standards of rest and stress echocardiography
- To understand the evidence based use of contrast enhancement in echocardiography
- To learn the indications for contrast echocardiography based on the 2017 EACVI guidelines
- To understand the clinical value of contrast enhancement in the recommended indications based on clinical from daily routine

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>12:45</td>
<td><strong>Introduction</strong> - Contrast echocardiography: clinical guidelines and evidences.</td>
</tr>
<tr>
<td>13:15</td>
<td>Clinical cases illustrating the EACVI Contrast Echocardiography guideline.</td>
</tr>
<tr>
<td>13:30</td>
<td>Q&amp;A and conclusion - Contrast echocardiography: clinical guidelines and evidences.</td>
</tr>
</tbody>
</table>

### Satellite Symposium - FARO

**How can echo and cardiac fusion imaging help cardiologists even more?**

**Sponsored by Philips Healthcare**

**Chairpersons:** K. Tiemann (Munich, DE); M.J. Monaghan (London, GB)

The learning objectives of this session are:
We will explore recent developments in heart model based automated 3D left heart volumetry, before learning the latest news in management of patients with mitral regurgitation and atrial fibrillation. Finally, we will discover clinical benefits of a miniaturized, fully functional TEE transducer. Join this session to find out how these innovations are relevant to you

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>12:45</td>
<td><strong>Opening remarks</strong> - How can echo and cardiac fusion imaging help cardiologists even more?</td>
</tr>
<tr>
<td>12:47</td>
<td>Where is the automatic 3D left heart volumetry today?</td>
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<tr>
<td>13:05</td>
<td>Mitral regurgitation and atrial fibrillation: challenges addressed by cardiac imaging.</td>
</tr>
<tr>
<td>13:24</td>
<td>Can a very small transducer have a big clinical impact?</td>
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<tr>
<td>13:43</td>
<td>Closing remarks - How can echo and cardiac fusion imaging help cardiologists even more?</td>
</tr>
</tbody>
</table>

### Satellite Symposium - EVORA

**Clinical value of advanced ultrasound cardiac analysis for the daily routine**

**Sponsored by Toshiba Medical Systems**

**Chairpersons:** H.-J. Nesser (Linz, AT); L. Perez De Isla (Madrid, ES)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>12:45</td>
<td>Clinical cases using advanced LV function analysis.</td>
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<tr>
<td>13:05</td>
<td>Clinical cases using 3D WMT in daily practice.</td>
</tr>
<tr>
<td>13:25</td>
<td>2D and 3D wall motion tracking in sport-medicine.</td>
</tr>
</tbody>
</table>
Pathophysiological insights for diagnosis and prognosis using advanced cardiovascular magnetic resonance imaging

Chairpersons: R. Nijveldt (Amsterdam, NL); G. Novo (Palermo, IT)

A cardiac magnetic resonance and Doppler echocardiography study: left atrial blood flow, left ventricular diastolic function and interstitial fibrosis in hypertrophic cardiomyopathy. P442

Prognostic impact and temporal changes within mechanical dyssynchrony and rotational mechanics in takotsubo syndrome: a cardiovascular magnetic resonance imaging study P443

Cardiac magnetic resonance myocardial feature tracking for optimized prediction of cardiovascular events following myocardial infarction P444

Assessment of reverse remodeling predicted by myocardial deformation on tissue tracking in patients with severe aortic stenosis: a cardiac magnetic resonance imaging study P445

Flow dynamics and aortic arch dilation in bicuspid aortic valve assessed by 4D flow CMR P446

Usefulness of cardiac magnetic resonance flow assessment to predict need for invasive treatment in aortic coarctation P447

Ascending and descending aorta biomechanics in a bicuspid aortic valve population P448

The role of wall shear stress and oscillatory shear index in ascending aorta dilation in bicuspid aortic valve P449
Mitral regurgitation in the era of edge-to-edge percutaneous procedure (continued)

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors/Institutions</th>
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</thead>
<tbody>
<tr>
<td>Echocardiographic predictors for a single vs. multiclip strategy in percutaneous mitral valve repair.</td>
<td>B. Goebel, N. Wystub, I. Rohm, A. Hamadanchi, C. Jung, P.C. Schulze, T.C. Poerner (Jena and Duesseldorf, DE)</td>
</tr>
<tr>
<td>Impact of interventional edge-to-edge repair with MitraClip system on mitral valve geometry in patients with secondary mitral regurgitation</td>
<td>S. Cimino, M. Pagliaro, A. Pasquini, V. Maestrini, M. Reali, D. Filomena, M. Mancone, G. Sardella, L. Agati (Rome, IT)</td>
</tr>
<tr>
<td>Annular systolic function, but not shape, is significantly affected by percutaneous mitral valve repair</td>
<td>A.J. Barron, S. Chotai, L. Kelly, R. Smith (London, GB)</td>
</tr>
</tbody>
</table>
### 14:00 - 15:30 Main Session

**Contemporary use of cardiac imaging in heart failure**

**Chairpersons:** A. Hagendorff (Leipzig, DE); A. Varga (Szeged, HU)

- **14:00** What are the best prognostic markers in heart failure - imaging markers vs other biomarkers.  
  T. Edvardsen (Oslo, NO)

- **14:22** When and how to image patients with hypertensive disease?  
  A.G. Fraser (Cardiff, GB)

- **14:45** Imaging in athletes - how to identify heart failure and when to stop exercise?  
  S. Caselli (Rome, IT)

- **15:07** How to use cardiac imaging for therapeutic guidance in heart failure.  
  I. Stankovic (Belgrade, RS)

### 14:00 - 15:30 Clinical Imaging

**Advances in the cath lab I**

**Chairpersons:** G. Habib (Marseille, FR); P. Pibarot (Quebec, CA)

- **14:00** Incorporating guidelines and recommendations into clinical practice.  
  V. Rigolin (Chicago, US)

- **14:22** Imaging during the procedure: what the interventional cardiologist wants to know?  
  M.J. Swaans (Hedel, NL)

- **14:45** Show me five complications I should never miss!  
  J.A. Abecasis (Lisbon, PT)

- **15:07** Old and new percutaneous aortic valves and devices.  
  H. Michelena (Rochester, US)

### 14:00 - 15:30 Symposium

**Do you understand CRT?**

**Chairpersons:** L. Herbots (Hasselt, BE); J. Gorcsan (St. Louis, US)

- **14:00** Modelling LV mechanics. - How to link load, delay and deformation?  
  J. Lumens (Maastricht, NL)

- **14:22** Standards and options - How to predict and measure CRT success?  
  L.E. Sade (Ankara, TR)

- **14:45** Patterns of motion and deformation - What can they add?  
  P. Sogaard (Aalborg, DK)

- **15:07** ECG, echo and more - How to characterize the perfect patient?  
  B. Bijnens (Barcelona, ES)

### 14:00 - 15:30 Teaching Course

**Valvular heart disease I**

**Chairpersons:** J.D. Kasprzak (Lodz, PL); A.M. Iliesiu (Bucharest, RO)

_Teaching courses are specifically dedicated to an audience aiming to improve its knowledge and understanding and perfect its skills in a main topic of the Core curriculum of the EACVI._

- **14:00** Mitral stenosis  
  S. Sengupta (Nagpur, IN)

- **14:22** Mitral regurgitation  
  F. Mantovani (Reggio Emilia, IT)

- **14:45** Aortic stenosis  
  A. Calin (Bucharest, RO)

- **15:07** Aortic regurgitation.  
  K. Yiangou (Nicosia, CY)
### Thursday 7 December 2017 - Afternoon Sessions

**Symposium**

#### EVORA

**Putting the right perspective on speckle tracking strain, is it all about**

Joint session with the Turkish Working Group of Cardiac Imaging

Chairpersons: M.S. Kucukoglu (Istanbul, TR); J. Separovic Hanzevacki (Zagreb, HR)

- **14:00** What does strain tell us in ischemic heart disease?  
  S. Unlu (Ankara, TR)
- **14:22** Left atrial strain: why do we need it?  
  E. Donal (Rennes, FR)
- **14:45** Strain in dyssynchrony: what is relevant?  
  N. Risum (Koebenhavn V, DK)
- **15:07** What is the additive role of assessing diastolic strain?  
  E. Eroglu (Istanbul, TR)

#### GUIMARAES

**The fantastic 4: the 4 best papers of my journal in 2017**

Chairpersons: H. Feigenbaum (Indianapolis, US); B.L.M. Gerber (Woluwe-St. Lambert, BE)

- **14:00** Circulation cardiovascular imaging.  
  L.D. Gillam (Morristown, US)
- **14:22** Journal of the American College of Cardiology Imaging.  
  C. Shekhar (Edina, US)
- **14:45** Journal of the American Society of Echocardiography.  
  A.S. Pearlman (Seattle, US)
- **15:07** European Heart Journal-Cardiovascular Imaging.  
  G. Maurer (Vienna, AT)

#### GUARDA

**Aortic regurgitation and the aorta**

Joint session with the Saudi Heart Association (SHA)

Chairpersons: E. Agricola (Milan, IT); A.J. Kinsara (Jeddah, SA)

- **14:00** Natural history of the bicuspid aortic valve.  
  J. Alrahimi (Jeddah, SA)
- **14:22** Pitfalls in quantifying aortic valve stenosis in case of bicuspid valve.  
  K.F. Fox (London, GB)
- **14:45** Pitfalls in quantifying aortic valve regurgitation in case of bicuspid valve.  
  F.A. Dalak (Riyadh, SA)
- **15:07** How to follow a patient with a dilated aorta.  
  G. Athanassopoulos (Pireas, GR)
### Thursday 7 December 2017 - Afternoon Sessions

#### 14:00 - 15:30  Rapid Fire Abstract  AGORA

**Assessment of LV performance**

Chairpersons: T.H. Marwick (Melbourne, AU); M. Takeuchi (Kitakyushu, JP)

<table>
<thead>
<tr>
<th>Time</th>
<th>Panel/Title</th>
<th>Presenters</th>
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<tbody>
<tr>
<td>14:00</td>
<td><strong>Panel of experts:</strong></td>
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<tr>
<td></td>
<td>E. Galli (Rennes, FR); S. Wiegers (Philadelphia, US)</td>
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<tr>
<td>14:09</td>
<td><strong>Guideline based selection of cardiac resynchronization therapy recipients- What can mechanical dysynchrony assessment add?</strong></td>
<td>A. Abbas, I. Stankovic, A. Ciarka, A. Daraban, M. Aarones, M. Szulik, S. Winter, A. Neskovic, T. Kukulski, S. Aakhus, R. Willems, W. Fehske, M. Penicka, L. Faber, J.U. Voigt (Leuven and Aalst, BE; Belgrade, RS; bucharest, RO; Oslo, NO; Silesia, PL; cologne and Bad Oeynhausen, DE)</td>
</tr>
<tr>
<td>14:18</td>
<td><strong>Myocardial contraction fraction is superior to ejection fraction in predicting functional capacity in patients with heart failure</strong></td>
<td>Y. Mahmoud, R. Raymond, H. Addow (Cairo, EG)</td>
</tr>
<tr>
<td>14:27</td>
<td><strong>Pressure-strain loops in the evaluation of left bundle branch block: septal function is aggravated by increased afterload</strong></td>
<td>J. Aalen, J. Hisdal, P. Storsten, E.W. Remme, C.K. Larsen, P.A. Sirnes, O. Gjesdal, H. Skulstad, O.A. Smiseth (Oslo and Moss, NO)</td>
</tr>
<tr>
<td>14:36</td>
<td><strong>Vortex intensity is associated with left ventricular longitudinal function</strong></td>
<td>L. Takahashi, T. Uejima, H. Nishikawa, H. Semba, H. Sawada, D. Chikamori, T. Yamashita (Tokyo, JP)</td>
</tr>
<tr>
<td>14:45</td>
<td><strong>Gender differences in prevalence of mechanical dysynchrony among LBBB patients</strong></td>
<td>J. De Pooter, V. Kamoen, M. El Haddad, R. Stroobandt, M. De Buyzere, L. Jordaeans, F. Timmermans (Ghent, BE)</td>
</tr>
<tr>
<td>15:03</td>
<td><strong>Delayed echocardiographic response after cardiac resynchronization therapy has also a good prognostic impact</strong></td>
<td>A.R. Marinheiro, L. Parreira, P. Amador, C. Sa, T. Duarte, M. Fonseca, J. Farinha, S. Goncalves, R. Rodrigues, I. Silvestre, L. Bernardino, C. Antunes, R. Caria (Setubal, PT)</td>
</tr>
<tr>
<td>15:12</td>
<td><strong>Strain analysis and myocardial viability: a comparative study of cardiac magnetic resonance and stress echocardiography</strong></td>
<td>D. Di Nunzio, G.D. Aquaro, P. Piaggi, S. Carerj, A. Pingitore, G. Di Bella (Messina and Pisa, IT)</td>
</tr>
</tbody>
</table>

#### 14:00 - 15:30  Workshop  TOE Room

**Focus on Mitraclip**

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

<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>14:00</td>
<td><strong>Focus on Mitraclip</strong></td>
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<td></td>
<td></td>
<td>N. Ajmone Marsan (Leiden, NL); M. Pepi (Milan, IT)</td>
</tr>
</tbody>
</table>
Thursday 7 December 2017 - Afternoon Sessions

15:30 - 16:30 Abstract Session AGORA

Young Investigator Award session - Clinical Science - The Roelandt’s Young Investigator Award

Chairpersons: B.A. Popescu (Bucharest, RO); G. Habib (Marseille, FR)
Judge(s): S. Nakatani (Takarazuka, JP); E. Donal (Rennes, FR); G. Maurer (Vienna, AT); P. Lancellotti (Liege, BE);
V. Rigolin (Chicago, US)

The abstract will be presented in one of the Young Investigator Award Sessions.
- 4 oral presentations will be held during the session.
- Sessions will be chaired by senior faculty members and presentations evaluated by a panel of renowned judges.
- Each presenter has 15 minutes to present the research.
- The presentation should not exceed 10 minutes to allow for question-and-answer period with the Chairpersons and judges.
- The presenter will be evaluated on: Originality, Scientific content and Presentation

15:30 Quantitative assessment of tricuspid regurgitation
Y. Peri, R. Beinart, G. Topaz, Y. Topilsky (Kfar Saba, Tel Hashomer and Tel Aviv, IL) 498

15:45 Global longitudinal strain decreases months before acute humoral but not before acute cellular rejection episode in heart transplant recipients
F. Cordeiro, A. Ciarka, A. Bellmans, J. Van Cleemput, W. Droogne, G. Voros, J.U. Voigt (Leuven, BE) 499

16:00 Harmful effects of exercise intensity and exercise duration in patients with arrhythmogenic cardiomyopathy

B. Cifra, A. Gragulescu, C. Manlhiot, C.S. Fan, K.M. Friedberg, P.C. Nathan, L. Mertens (Toronto, CA) 501

15:30 - 16:30 Moderated Posters MODERATED POSTER AREA

Clinical cases moderated - Myocardial disease: see that case at least once!

Chairpersons: M. Dorobantu (Bucharest, RO); N. Ohte (Nagoya, JP)

Myopericarditis in a patient with Crohn's disease: extraintestinal manifestation or drug-induced?
J.B. Augusto (Amadora, PT) P502

Sudden cardiac arrest in patient with inflammatory cardiomyopathy
V. Chubuchnyy (Pisa, IT) P503

Unusual infiltrative progression after optimal sustitutive therapy.
N.E. Villalva (Barcelona, ES) P504

Noncompaction cardiomyopathy misdiagnosed as dilated cardiomyopathy
H. Phan (Hcm City, VN) P505

Dramatic reversal of dilated cardiomyopathy caused by severe hypocalcaemia
K. Chan (London, GB) P506

Churg-Strauss syndrome: a rare cause of myocarditis
P.M. Araujo (Vila Nova De Famalicao, PT) P507

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

How to write a good abstract
EACVI HIT (Heart Imagers of Tomorrow)

Chairperson: D. Morrone (Firenze, IT)

How-to session provides practical details and tools or tips and tricks on a specific topic related to the research. These sessions are built to help attendees to improve their experiences to complete successfully research project: from founding and grant application, to data analysis, results presentation and publication.

15:40 Presenter:
R. Sicari (Pisa, IT) 508
### Thursday 7 December 2017 - Afternoon Sessions

#### Main Session

**Cardiac resynchronization therapy: how to get the best out of the device**

*Mobile App - Vote and Ask a Question*

**Chairpersons:** O. Chioncel (Bucuresti, RO); R. Citro (Salerno, IT)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>16:30</td>
<td>Mobile App Interactive Session.</td>
<td>LISBOA</td>
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<tr>
<td>16:30</td>
<td>How imaging may increase implantation success rates?</td>
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<tr>
<td>16:52</td>
<td>How to use imaging PRE-CRT?</td>
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<tr>
<td>17:15</td>
<td>Should we guide the leads implantation?</td>
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<td>17:37</td>
<td>How to perform the follow-up?</td>
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<tr>
<td>16:30</td>
<td><strong>Clinical Imaging</strong></td>
<td>PORTO</td>
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<tr>
<td>16:30</td>
<td>Advances in the cath lab II</td>
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<tr>
<td>16:30</td>
<td>Echo before the mitral intervention - what should the echo report include?</td>
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<tr>
<td>16:52</td>
<td>Cases percutaneous devices: why was this one chosen? Show me what I need to do during the procedure.</td>
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<tr>
<td>17:15</td>
<td>When things go wrong, echo saves the day!</td>
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<tr>
<td>17:37</td>
<td>Old and new mitral &amp; tricuspid valves and devices.</td>
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<tr>
<td>16:30</td>
<td><strong>Debate Session</strong></td>
<td>FARO</td>
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<tr>
<td>16:30</td>
<td>Imaging Heart failure: bloody session</td>
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<tr>
<td>16:30</td>
<td>First round: CT/Nuclear is the best.</td>
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<tr>
<td>16:52</td>
<td>Second round: CMR is required.</td>
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<tr>
<td>17:15</td>
<td>Third round: Echo is enough.</td>
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<tr>
<td>17:37</td>
<td>Open “free fight”.</td>
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#### Teaching Course

**Valvular heart disease 2**

**Chairpersons:** R. Hahn (New York, US); S. Mihaileanu (Paris, FR)

*Teaching courses are specifically dedicated to an audience aiming to improve its knowledge and understanding and perfect its skills in a main topic of the Core curriculum of the EACVI.*

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<tbody>
<tr>
<td>16:30</td>
<td>Standard echo examination of prosthetic valves.</td>
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<tr>
<td>16:52</td>
<td>Prosthetic valve pathologies.</td>
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<tr>
<td>17:15</td>
<td>Right-sided valve diseases.</td>
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<tr>
<td>17:37</td>
<td>Native valve endocarditis.</td>
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Thursday 7 December 2017 - Afternoon Sessions

16:30 - 18:00

**Symposium**

**EVORA**

**Hot topics in valvular heart disease**

*EACVI HIT (Heart Imagers of Tomorrow)*

Chairpersons: M.M. Gurzun (Bucharest, RO); H.M. Elsayed (Aswan, EG)

- 16:30 3D echocardiography of the tricuspid valve.
  E. Surkova (Padua, IT)
- 16:52 CMR evaluation of myocardial fibrosis in valvular heart disease.
  T. Podlesnikar (Maribor, SI)
- 17:15 Multimodality imaging in preprocedural assessment for TAVR.
  R.R. Buechel (Zurich, CH)
- 17:37 Multimodality imaging in bicuspid aortic valve and aortopathy.
  T. Lapinskas (Kaunas, LT)

16:30 - 18:00

**Symposium**

**GUIMARAES**

**Computing in Echocardiography and multimodality imaging**

Chairpersons: J. D’hooge (Leuven, BE); B. Bijnens (Barcelona, ES)

- 16:30 Cardiac mechanics and hemodynamics - behind the scene.
  J.D. Thomas (Chicago, US)
- 16:52 Echocardiographic apps - smart phone-assisted point-of care decision making.
  I. Simova (Sofia, BG)
- 17:15 EduCAD - web-based educational tool for training in multimodality.
  J. Grapsa (London, GB)
- 17:37 Remote echocardiography and web-based assessment - the new era.
  P.P. Sengupta (Morgantown, US)

16:30 - 18:00

**Symposium**

**GUARDA**

**Congenital heart disease: heart failure and transplantation**

Chairpersons: W. Li (London, GB); E.R. Valsangiacomo Buechel (Zurich, CH)

- 16:30 Heart failure in CHD: Imaging markers of recovery.
  H. Grotenhuis (Utrecht, NL)
- 16:52 Pre and post transplant imaging and decision making.
  F. Kucera (To Be Confirmed, GB)
- 17:15 Imaging for CRT in congenital heart disease.
  M.K. Friedberg (Toronto, CA)
- 17:37 Diastolic dysfunction in ACHD? Which criteria should we use?
  W. Budts (Leuven, BE)

16:30 - 18:00

**Rapid Fire Abstract**

**AGORA**

**Congenital Heart Disease**

Chairpersons: G. Di Salvo (London, GB); D. Coleman (Dublin, IE)

- 16:30 Panel of experts:
  W.A. Helbing (Rotterdam, NL); J. Simpson (London, GB)
- 16:30 Aortic flow and shear stress in bicuspid aortic valve, a multimodality approach
  S. Aguilar Rosa, D. Oliveira, A. Garriño, L. Branco, J. Tiago, A. Agapito, L. Sousa, J. Oliveira, A. Timoteo, A. Sequeira, L. Figueiredo, R. Cruz Ferreira (Lisbon, PT)
- 16:39 Bicuspid aortic valve phenotype and the degree of aortic stenosis affect diameters of aorta - a systematic review, meta-analysis and meta-regression
  D. Miskowicz, P. Lipiec, K. Kuczyńska, J.D. Kasprzak (Lodz, PL)
- 16:48 Mixed reality holograms for surgical planning in congenital heart disease
  H. Brun, R.A.B. Bugge, K.R. Suther, C. Tannum, F. Rashidi, S. Birkeland, O.L.E.J. Elle (Oslo, NO)
**16:30 - 18:00 Rapid Fire Abstract AGORA**

**Congenital Heart Disease (continued)**

16:57  Clinical and haemodynamic changes after pregnancy in patients with repaired tetralogy of fallot  

17:06  Relationship between ventricular function and exercise performance in adult patients with Fontan circulation  

17:15  Aortic root dilatation and aortic regurgitation in tetralogy of Fallot  
H.B. Grotenhuis, M.K. Friedberg, I.M. Verpalen, M.J.E. Van Den Akker, F. Dallaire (Utrecht, NL; Toronto and Sherbrooke, CA)

17:24  Echocardiographic study of pregnant patients with bicuspid aortic valve  
A.M. Lesniak-Sobelga, M. Kostkiewicz, S. Wisniowska-Smialek, K. Holcman, M. Hlawaty, P. Podolec (Krakow, PL)

17:33  The unnatural course of right ventricular dilatation in patients with severe pulmonary regurgitation after repair of Tetralogy of Fallot  
M. Hoelscher, F.B. Bonassin, A. Oxenius, M. Greutmann, B. Lombardi, C. Kellenberger, E. Valsangiaco (Zurich, CH; Rome, IT)

17:42  Serial echocardiography to assess the durability of pulmonary valve replacements in adult congenital heart disease  
S.F. Al-Refaie, A.S. Gnanachandran, S. Bowater, S. Thorne, L. Hudsmith, V. Stoll, P. Clift (Birmingham, GB)

17:51  Exercise induced hypertension in young patients after successful aortic coarctation repair: impact on left ventricular geometry and function.  

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**16:30 - 18:00 Workshop TOE Room**

**Focus on ASD closure**

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

16:30  Presenters:  
K. Papadopoulos (Athens, GR); M.H.Miglioranza (Porto Alegre, BR)
Thursday Posters
HIT MODERATED POSTER SESSION
All posters are on display from 08:30 to 18:00.
12:45 - 13:45 - Lunchtime HIT Poster hosts.
Meet the presenters by their poster

CLINICAL CASE MODERATED POSTER SESSION
MORNING
All moderated posters are on display from 08:30 to 12:30.
10:00 - 11:00 - Meet the presenters by their poster.

AFTERNOON
All posters are on display from 14:00 to 18:00.
15:30 - 16:30 - Meet the presenters by their poster.

ABSTRACT MODERATED POSTER SESSION
All moderated posters are on display from 08:30 to 18:00.
12:45 - 13:45 - Meet the presenters by their poster.

ABSTRACT & CLINICAL CASE POSTER SESSIONS
MORNING
All posters are on display from 08:30 to 12:30.
10:00 - 11:00 - Meet the presenters by their poster.

AFTERNOON
All posters are on display from 14:00 to 18:00.
15:30 - 16:30 - Meet the presenters by their poster.

HIGH SCORE POSTER
Look out for these abstracts acknowledged by the reviewing committee.

Missed a presentation?
After the congress, abstracts will be available online and a selection of slide presentations will be available only to EACVI Members.
More information on the ESC-EACVI Stand.

IMPORTANT INFORMATION FOR PRESENTERS
MORNING SESSIONS:
Poster presenters must set up Poster between 08:00-08:30.
All posters not affixed by 10:00 may be considered as no-show.
Posters must be removed from the area between 12:30 - 13:00.

AFTERNOON SESSIONS:
Poster presenters must set up Poster between 13:30 - 14:00.
All posters not affixed by 15:30 may be considered as no-show.
Posters must be removed from the area between 18:00 - 18:30.

Abstract presenters can consult the POSTER ASSISTANCE DESK for further information and to retrieve their Certificate of Presentation.
Association of conventional echocardiographic parameters and cardiovascular risk factors with left atrial strain by 2D speckle tracking
A. Romeika, A. Varoniukaitė, R. Slapikas, R. Jurkевичius, J. Petkevičienė, I. Čepioniene (Kaunas, LT)

Left atrial longitudinal strain at the conduit phase: a new additional parameter in predicting elevated capillary wedge pressure in patients candidate for heart transplant
G. Romano, S. Magro, C. Mina, G. Novo, C. Falletta, G. Di Gesaro, S. Novo, F. Clemenza, D. Bellavia (Palermo, IT)

Impact of ace inhibitors and beta blockers treatment on left ventricular function in her2 positive breast cancer patients
I. Krstić, M. Deljanin Ilić, S. Vrbić, D. Marinković (Niš, RS)

Right ventricular dysfunction impact on ST-elevation myocardial infarction outcomes
M. Moz, F. Cordeiro, S. Leao, J. Guimarães, P. Mateus, R. Margato, J.I. Moreira (Vila Real, PT)

Estimating left ventricular filling pressure by echocardiography: validation of ASE/EACVI 2016 guidelines on diastolic function and comparison to the previous guidelines

Left atrial longitudinal strain at the conduit phase: a new additional parameter in predicting elevated capillary wedge pressure in patients candidate for heart transplant
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08:30 - 12:30  Poster Session  POSTER AREA

Clinical Case Poster session 2

Giant thrombi in giant left atrium
I. Duraes Campos (Braga, PT)

Dyspnea and edemas, when the ventricle holds surprises
M. Alcocer Ayuga (Madrid, ES)

Cardiac myxoma with four recurrences, the neverending story?
A. Kalinin (Riga, LV)

Nonbacterial thrombotic endocarditis mimicking granulocytic sarcoma (chloroma) in patient with newly diagnosed acute
myeloid leukemia
M.S. Kim (Seoul, KR)

Unresectable intrapericardial paraganglioma: mid-term follow up
M. Briani (Rome, IT)

Haematoma following traumatic retrograde cannulation of the coronary sinus with cardioplegia cannula
M.B. Castro Verdes (A Coruna, ES)

Massive intracardiac thrombus trapped in the foramen ovale
I. Petrescu (Rochester, US)

3D transoesophageal echocardiography as a guide to cardiac mass biopsy
M. Briani (Rome, IT)

A murmur in an asymptomatic 60 years old woman: an unusual presentation of ALCAPA syndrome
A.G. Pavon (Milan, IT)

Casual cardiac arrest at the door of hospital
A. Valle (Marbella, ES)

A rare case of chest pain
L. Ruiz Gomez (Bilbao, ES)

Myocardial infarction without significant coronary stenosis, transmural myocardial fibrosis at cardiac MR and non-obstructive
high risk coronary atherosclerotic plaque at cardiac CT
E. Conte (Milan, IT)

A diagnostic conundrum in aortic regurgitation - supravalvular aortic membrane or aortic dissection?
C. Li (Singapore, SG)

A rare case of acute aortic regurgitation
I. Duraes Campos (Braga, PT)

Right atriofemoral
S. Bonapace (Verona, IT)

Management for prosthetic valve malfunction: case report and review.
W.S.A. Mohamed (Salmia, KW)

Thrombosis of a prosthetic mitral valve presenting as acute coronary syndrome with ST elevation.
M. Romero Castro (Madrid, ES)

A particularly case of tricuspid valve endocarditis due to jet lesion in a patient with congenital heart disease
I. Dentamaro (Bari, IT)

Valve wars: attack of the bacilli; a case of an aggressive culture-negative endocarditis
S. Loizos (Athens, GR)

Early appearance of a ventricular septal defect and worsening of dynamic left ventricular outflow tract obstruction after
transcatheter aortic valve replacement in a risky anatomy
C. Marini (Milan, IT)

Key role of multimodality imaging in transcatheter mitral valve replacement in mitral regurgitation: insights from the first
implantation in France.
A. Coise (Lille, FR)

Rare case of carcinoid heart syndrome with involvement of all valves in a patient with neuroendocrine tumor and hepatic
metastases
D. Dischil (Weiheim, DE)

Combined orthotropic heart transplantation followed by autologous stem cell transplantation in a patient with light chain
amyloidosis and isolated cardiac involvement
V.M. Parato (San Benedetto Del Tronto, IT)

Atrial fibrillation during adjuvant therapy of breast cancer: the role of global longitudinal strain for an appropriate diagnosis of
cardiotoxicity
M. Lembo (Naples, IT)
An adult with syncope who has a sinus venosus type atrial septal defect and partial anomalous pulmonary venous return misdiagnosed as arrhythmogenic right ventricular dysplasia
U. Yildiz (Istanbul, TR)

Managing a case of high-output heart failure with a tangled aetiology
R.G. Badea (Bucharest, RO)

Early diagnosis of hypereosinophilic syndrome with loeffler endocarditis by echocardiography
U.D. Breskvar (Ljubljana - Crnuce, SI)

A rare cause of post-operative cardiac tamponade
M.B. Castro Verdes (A Coruna, ES)

Effusive constrictive pericarditis: is it real?
A. Fareed (Ismailia, EG)

A rare case of a cardiac arteriovenous fistula
J. Ferreira (Coimbra, PT)

A membranous septal aneurysm causing right ventricular outflow tract obstruction in an adult.
F. Privitera (Pietraperzia, IT)

Late closure of a ventricular septal defect with a fenestrated patch after treatment with pulmonary vasodilators: the good, the bad and the ugly
D.M. Dorobantu (Bucharest, RO)

Intraventricular septal dissection: a rare complication after cardiac surgery
G. Aurrekoetxea Bajeneta (Bermeo, ES)

Left upper lobe partial anomalous pulmonary venous connection associated with patent foramen ovale as a rare cause of dyspnea: an imaging-based diagnosis
A.A. Ionescu (Bucharest, RO)

A strange extra aortic valve leaflet
A. Marques (Braga, PT)

A rare vascular structure
R. Laymouna (Alexandria, EG)
### Poster Session 2

#### The imaging examination and quality assessment

**Upstream Quality Control of B-line in Stressecho 2020**

**Visual assessment of left ventricular ejection fraction: frequency of use in routine practice in Poland**
R. Dankowski, J. Zaprutko, P. Kalmucki, K. Kochman, W. Sacharczuk, A. Szyżyska (Poznan, PL)

**Agreement of Left ventricular assessment of patients with left bundle branch block using quantitative methods between echocardiography and Magnetic Resonance Imaging**
A.M. Mistry, N. Natarajan, G.M. Mccann (Leicester, GB)

#### Assessment of morphology and function

**Reduced LA strain followed by enlarged diameter are the best predictors for recurrent atrial fibrillation after catheter ablation: a systematic review and meta-analysis**
G. Bajraktari, P. Ibrahimii, I. Bytyci, E. Haliti, M.Y. Henein (Pristina, XK; Umea, SE)

**Disjunction, a separation between the atrial wall-mitra1 valve junction and the left ventricular attachment**
A. Isotani, T. Schau, M. Schoepp, M. Neuss, C. Butter (Bernau bei Berlin, DE)

**Role of effective regurgitant orifice area as independent determinant of left atrial peak longitudinal strain**
R.M. Inciardi, C. Greco, C. Bergamini, G. Benfari, C. Vassanelli, A. Rossì (Verona, IT)

**Evaluation of atrial conduction abnormalities in patients with different degree of essential hypertensio arterialis**
D. Dijkic, B. Dejanovic, N. Mujovic, A. Kocijancic, M. Marinkovic, N. Jankovic, B. Orbovic, V. Kovacevic, S. Lazic, V. Prceic, D. Simic (Belgrade and Pristina, RS)

**Whether we should expect for an early response to cardiac resynchronisation therapy**
V.A. Kuznetsov, A.M. Soldatova, D.V. Krinicki, T.N. Enina (Tyumen, RU)

**Accuracy of the novel semi-automatic 3-dimensional ultrasound analysis system for abdominal aortic aneurysm: Comparison with 2-dimensional ultrasound and aortic CT angiography**

**Aortic stiffness is increased in cardiac amyloidosis**

**Additional cardiac remodeling of a military special operation forces program in young athletes**
P.J. Gomes Dinis, H. Dores, R. Teixeira, L. Mendes, P. Dinis, J.F. Santos (Lisbon and Setúbal, PT)

**Myocardial deformation after acute myocarditis with infarct-like presentation. A 2-D strain follow-up study.**
M. Campisi, C. De Gregorio, S. Carerj, R. Donato, A. Recupero, C. Zito, R. Costantino, P. Pugliatti, D. Di Nunzio, G. Di Bella (Messina, IT)

**Myocardial deformation and intensity of exercise in athletes, new overlap between pathology and physiologic**
H.D. Dores, L. Mendes, P. Dinis, J.F. Santos (Lisbon and Setúbal, PT)

**Impact of longitudinal changes in left ventricular ejection fraction on outcomes of patients with mid-range ejection fraction and reduced ejection fraction**

**Cardiovascular remodeling in athletes and militaries: a comparative study**
P.J. Gomes Dinis, R. Teixeira, H. Dores, P. Correia, M. Madeira, M.C. Cachulo, J. Cardoso, L. Goncalves (Coimbra and Lisbon, PT)

**Is strain analysis ready for prime time? a test retest comparison study under real world conditions**

**Reproducibility and clinical reliability of new and conventional echocardiographic parameters of left ventricular systolic function**
T. Baron, L. Berglund, E.M. Hedin, F.A. Flachskampf (Uppsala, SE)

**Effects of an extensive echocardiographic biventricular pacemaker optimization protocol on the rate of non-responders after cardiac resynchronization therapy.**
P. Barbier, C. Agalbato, I. Viscone, M. Guglielmo, G. Savioli (Milan and Pavia, IT)

**Reference ranges for transthoracic echocardiography following heart transplantation**

**3d strain parameters in relation to brain natriuretic peptide in patients with dilated cardiomyopathy**
M. Rady, K. Sverie, R.H. Strasser, K. Ibrahimii (Dresden, DE)
Clinical significance of right ventricular longitudinal function parameters after aortic valve replacement
A. Coisne, T. Modine, F. Outteryck, S. Mouton, R. Pilato, H. Ridon, M. Richardson, A. Duva-Pentiah, B. Boutie, M. Jacquelinet, M. Koussa, G. Fayad, P. Lancellotti, D. Montaigne (Lille, FR; Liege, BE)

Assessment of the temporal right ventricular strain-area relation in pulmonary arterial hypertension

Interest of 3D echocardiography in the assessment of right ventriculo-arterial coupling

3D Right ventricular strain: comparative analysis of Tetralogy of Fallot and atrial septal defect
P. Moceri, M. Sermesant, D. Baudouy, E. Ferrari, F. Tanner, T.F. Luescher, R.K. Binder (Zurich, CH; Wels, AT)

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Evaluation of layer strain in right ventricular free wall assessed by two-dimensional speckle tracking echocardiography in patients with pulmonary hypertension

Tricuspid annular displacement using speckle-tracking 2D echocardiography as a simple index for right ventricular systolic function: comparison with 3D echocardiography

Can we early identify STEMI patients treated by pPCI at risk to develop heart failure: a speckle tracking echocardiographic study with one year follow-up?
D. Trifunovic, G. Krijanac, L. Savic, M. Asarin, R. Lasica, D. Matovic, J. Stepanovic, G. Stankovic, I. Mrdovic (Belgrade, RS)

Heart valves

Does left atrial and ventricular peak systolic strain change after exercise in patients with mild rheumatic mitral stenosis?
M. Akbulut, C. Tulunay Kaya, D.M. Gerede Uludag, C. Erol (Ankara, TR)

Stress echocardiography: a safe and useful test in the management of patients with rheumatic mitral stenosis?

Diastolic retrograde flow in the ascending aorta for quantification of aortic regurgitation - insights from a cardiovascular magnetic resonance imaging study
Early changes of left ventricular rotational dynamics and relationship with myocardial deformation in significant chronic aortic regurgitation with normal ejection fraction
R. Verseckate, V. Mizariene, A. Montvilaite, I. Auguste, R. Jurkevicius (Kaunas, LT)

Evaluation of the integrative algorithm for aortic regurgitation severity by current ASE recommendations using cardiac magnetic resonance as reference method
O. Bech-Hanssen, S.A. Gao, A.Å. Johnsson, K.M. Lagerstrand, C.L. Polte (Gothenburg, SE)

Exercise stress echocardiography in asymptomatic patients with severe aortic regurgitation

Assessing of aortic regurgitation by real time echocardiographic 3D proximal isovelocity surface area (3D-PISA) method: a pilot study

Indexed ring areas of aortic valve complex by body size in patients with aortic regurgitation are larger than that in cases with normal aortic valve function and aort stenosis.

Measurement of height of valvular rings and volume of valsalva sinus in aortic valve complex in patients with aortic valve diseases by using 3D trans esophageal echocardiography

Clinical and echocardiographic follow-up of patients with prosthetic heart valves: a large tertiary centre experience
B. Alaour, C. Menexi, B. Shah (Southampton, GB)

Clinical characteristics and mortality predictors of patients with surgically implanted tricuspid bioprosthetic valves

Mortality predictors in patients with tricuspid bioprosthetic valves. The role of echocardiography

In-hospital mortality in patients with infective endocarditis: comparison between different scoring systems

Clinical use of cardiac imaging in the assessment of infective endocarditis. A single centre experience.
F. Panzeri, M.C. Ferrara, A. Moreo, B. De Chiara, F. Casadei, F. Musca, F. Spano’, G. Santambrogio, O. Belli, C. Giannattasio (Milan, IT)

Evolution of patients with acute infective endocarditis rejected for surgery
N. Soto Flores, N. Vallejo, R. Nunez, L. Mateu A. Vivero, N. Sopena, A. Teis, L. Pedro Botet, R. Adelino, E. Cascos, A. Bayes Genis (Badalona (Barcelona), ES)

Direct effect of transcatheter aortic valve implantation on mid-term left ventricular function and remodelling: a speckle tracking echocardiography study

Pre-operative annular shape, but not size, predicts functional improvement following percutaneous mitral valve repair
A.J. Barron, S. Chotai, L. Kelly, R. Smith (London, GB)

The typically large reduction in left ventricular ejection fraction seen following surgical correction of mitral regurgitation is not seen following percutaneous mitral valve repair
S. Chotai, L. Kelly, C. Di Mario, R. Smith, A.J. Barron (London, GB)

Evaluation on rheumatic mitral stenosis patients: discriminating those in sinus rhythm from atrial fibrillation. A cardiac magnetic resonance preliminary study
C.A. Atmadikoesoemah, E. Elen, M. Kasim (Jakarta, ID)

Cardiomyopathies
Significance of cardiac magnetic resonance imaging after aborted sudden cardiac death in patients with normal coronary angiography

Cardiac MRI for a better identification of structural heart disease in patients with ventricular arrhythmia
D. Andreini, S. Mushtaq, E. Conte, S. Zanchi, E. Menotti, V. Ditali, M. Guglielmo, A. Santos, F. Fassari, E. Mancini, G. Pontone, M. Pepi (Milan, IT)

Assessing aortic regurgitation by real time echocardiographic 3D proximal isovelocity surface area (3D-PISA) method: a pilot study
Ranolazine post-treatment reduces cardiotoxic effects due to Trastuzumab Emtansine: in vitro and in vivo study

Echocardiographic guided screening for Fabry disease in a metropolitan area not already explored
R. Citro, C. Prota, A. Silverio, M. Bellino, D. Di Vece, D. Ferraioli, I. Radano, P. Bottiglieri, R. Napoletano, R. Ascoli, L. Soriente, A. Gigantino, E. Bossone, F. Piscione (Salerno and Cava De’ Tirreni, Salerno, IT)

Comparative effectiveness of torasemide versus furosemide in symptomatic therapy in heart failure patients: results from the TORNADO trial.

Restrictive heart remodeling among breast cancer survivors
N. Maroz-Vadalazhskaya, A. Zakharevich (Minsk, BY)

Prognostic value of renal dysfunction in patients with left ventricular non-compaction cardiomyopathy

Evaluation of systolic and diastolic left ventricular function in patients with systemic lupus erythematosus by speckle tracking echocardiography
A.S.P. Tadeu, O. Azevedo, F. Castro, M. Lourenco, A. Lourenco, I. Tadeu (Braga, Guimaraes and Vila Real, PT)

Systemic diseases and other conditions

Greater improvement myocardial deformation and endothelial glycocalyx by inhibition of Interleukin-6 activity in patients with rheumatoid arthritis

Patients with psoriatic arthritis present greater improvement of left ventricular torsional mechanics than patients with psoriasis after treatment with biological agents

Prevalence of cardiac sarcoidosis in patients with pulmonary sarcoidosis

Correlation of ankle brachial index measurement by and for cardiologists: are all the techniques valid?
O.G. Perea, M. Corneli, R. Henquin (Buenos Aires, AR)

Detection of subclinical myocardial involvement in patients with systemic sclerosis by myocardial 18F-FDG PET/CT and speckle tracking echocardiography
G. Agoston, Z.S. Besenyi, R. Hemelein, A. Palinka, L. Kovacs, L. Pavics, A. Varqa (Szeged, HU)

Carotid arterial circumferential strain as a subclinical indicator for cardiovascular involvement in patients with ankylosing spondylitis
L. Law, H. Forsblad Delia, P. Lindqvist (Umea, SE)

Functional and structural cardiac abnormalities in osteogenesis imperfecta

The role of cardiopulmonary exercise test in the evaluation of patients with ankylosing spondylitis

One year echocardiographic follow-up in scleroderma patients on standard therapy
S.L. Magda, V.D. Bratu, A.M. Gheorghiu, R.I. Mincu, T. Constantinescu, C.M. Mihaï, M. Cîntea, D. Vinereanu (Bucharest, RO)

Subclinical alterations in left ventricular function in patients with psoriasis: compared with the patients with psoriatic arthritis

Congenital heart disease

Pulmonary artery dilation parallels ascending aorta dilation in children with bicuspid aortic valve
D.M. Dorobantu, R. Enache, I. Ghiorghiu, R. Badea, C. Ginghina, B.A. Popescu (Bucharest, RO)

Diagnosing ARVC in pediatric patients applying the revised Task Force Criteria: Importance of imaging, 12-lead ECG and genetics

Echocardiographic assessment of ventricular contraction and synchrony in children with isolated complete atrioventricular block and epicardial pacing: midterm outcome according to pacing sites
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Geometry of aortic root in bicuspid valve with and without regurgitation - 3D ECHO study P680
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Echocardiographic evaluation of right ventricular systolic function and pulmonary hypertension in young patients with pulmonary sarcoidosis P688
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Tissue Doppler and speckle tracking
Feasibility and reproducibility of left ventricular longitudinal strain measurements in pre term babies using two dimensional speckle tracking echocardiography.
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From electric to mechanic: left ventricle mechanical dispersion as a marker of arrhythmogenic risk in post-MI patients
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Myocardial stretch propagation in late diastole in healthy volunteers
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Arterial hypertension as the risk factor of the worse left atrial remodeling in patients undergoing pulmonary vein isolation
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Echocardiographic evaluation of aortic biomechanics in relation to disease activity and central pulse wave velocity in patients with ankylosing spondylitis
D. Ozkaramanli Gur, D.N. Ozaltin, A.B. Sarifakıoglu, A. Akyuz, S. Alpsoy (Tekidag, TR)  
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Correlation between conventional echocardiography and myocardial deformation imaging in assessment of the prognosis in patient with coronary artery aneurism after Kawasaki diseases
R. Marinov, K. Hristova, I. Chakarov, A. Telcharova (Sofia, BG)  
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Rationale and design of the CARDIOBESE study
R. Marinov, K. Hristova, I. Chakarov, A. Telcharova (Sofia, BG)  
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Left atrial function in hypertensive patients assessed by 2D speckle tracking echocardiography
T. Ahmed, M. Hassan, A. Mazen, E. Samy (Cairo, EG)  
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Association between myocardial deformation and cystatin c levels in hypertensives without chronic kidney disease
M.Y. Kolesnyk, M.V. Sokolova, O.V. Kolesnyk (Zaporizhzhya, UA)  
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The association between segmental scar burden and late occurrence of post-systolic strain
E. Nestaas, O. Gjesdal, S. Sarvari, E. Hopp, H.J. Smith, K.H. Haugaa, T. Edvardsen (Oslo, NO)  
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Impact of increased aortic transvalvular gradient on myocardial mechanics in patients with mechanical prosthetic aortic valve
B. Pirat, A. Ozyildiz, H. Muderrisoglu (Ankara, TR)  
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Evaluation of left ventricular performance in hypertensive patients by speckle tracking echocardiography: correlation with brain natriuretic peptide
W. Hamed, M.F. Noamany, M.A. Soliman, M. Abd El Raouf (Shebin El-kom, EG)  
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Echocardiographic evaluation of right ventricular myocardial dysfunction in patients with arterial hypertension
S. Ivanov, V. Matveev, L. Kuznetsova, I. Dmitrieva (Moscow, RU)  
P710

The impact of abnormal circadian bp profile on left atrial function by 2D speckle tracking echocardiography and its effect on functional capacity in hypertensive patients
T. Ahmed, N. Hassan, A. Mazen, E. Samy (Cairo, EG)  
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Speckle tracking echocardiography of left atrium as an assessment tool in patients with atrial fibrillation
P. Bhaward, G. Gieerup Fornitz, J. Roland Petersen (Copenhagen and Slagelse, DK)  
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Left atrial (LA) strain reliably reflects LA stiffness in heart failure patients with reduced, but not in those with preserved ejection fraction
A. Lundberg, A. Abdulrahim, C. Da Silva, A. Venkateshvaran, C. Lourenco, B. Minkley, L.H. Lund, A.I. Nagy, A. Manouras (Stockholm, SE; Budapest, HU)  
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Left ventricular stiffness estimation in HFpEF patients using 3D echocardiography and tissue Doppler imaging
U. Primesnig, M. Krisper, E. Pieske-Kraigher, D. Morris, B. Pieske, C. Tschoepe (Berlin, DE)  
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Poster Session

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**Critical review and overview of current adult echocardiographic nomograms**

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**Assessment of morphology and function**

**Very small left atrial volume as a marker for mortality**

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E. Cambroner Cortinas, J.G. Grapsa, A. Valle, M.J. Corbi-Pascual, W. Gin-Sing, D. Dawson, L. Howard, P. Nihoyannopoulos, S. Gibbs (London, GB; Denia and Albacete, ES)

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**Right atrial volumetric and strain analysis in light-chain (AL) cardiac amyloidosis - a three-dimensional speckle-tracking echocardiographic study**


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**Simplified regression-based echocardiographic calculation of right atrial pressure**

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Exercise stress echocardiography value after pulmonary embolism

Transesophageal echocardiography
Atrial fibrillation cycle length measured by transesophageal echocardiography predict recurrence of atrial fibrillation after direct current cardioversion

Contrast echocardiography
Heart failure with preserved ejection fraction in chronic fatigue syndrome.
B. Shivalkar, L. Vanderakkerveken, G. Moorkens (Antwerp, BE)

Tissue Doppler and speckle tracking
Evaluation of fetal cardiac structure and function in women with gestational diabetes mellitus

Global atrial longitudinal strain is a powerful predictor of catheter ablation efficacy in patients with atrial fibrillation
E. Pilichowska, J. Baran, P. Kulikowski, B. Zaborska (Warsaw, PL)
Value of myocardial work estimation in the prediction of response to cardiac resynchronization therapy
E. Galli, C. Leclercq, A. Hubert, A. Hernandez, O. Smiseh, E. Samset (Rennes, FR; Oslo, NO)

Association of echocardiographic parameters with coronary artery calcium score in population with low to intermediate risk for ischemic heart disease
B. Tayal, F. Ericsson, T. Zaremba, C. Torp-Pedersen, R. Mogelvang, K.H. Kragholm, J. Rasmussen, P. Sogaard (Hjørring, Aalborg and Copenhagen, DK)

Cardiac mechanics before and after percutaneous closure of patent ductus arteriosus: the effect of acute preload changes

Cardiac mechanics in children and young patients with a history of kawasaki disease: a speckle tracking echocardiographic study.

Traditional echocardiographic parameters and right ventricular peak systolic strain analysis in pulmonary embolism
S. Trivedi, A. Terluk, E. Chia, C. Mussap, K. Byth, V. Chow, L. Kritharides, A. Nq, L. Thomas (Sydney, AU)

Novel echocardiographic predictors of outcome in pulmonary arterial hypertension
V. Mercurio, M. Mukherjee, R.J. Tedford, A.A. Shah, S. Hsu, R. Damico, T.M. Kolb, S.C. Mathai, P.M. Hassoun (Baltimore, US)

Regional strain pattern index - a novel technique to predict CRT response

Circumferential strain of carotid artery, representing vascular stiffness, is deteriorated nondipper never-treated hypertensive patient

Ratio of transmitral early filling velocity to early diastolic strain rate as a predictor of heart failure and acute myocardial infarction following acute coronary syndrome

Myocardial deformation analysis detects early cardiac dysfunction and has predictive value for abnormal left ventricular ejection fraction after chemotherapy in bone marrow transplantation patients

Left atrium strain and left ventricle twist in patients with complete left bundle branch block
E.N. Pavlyukova, D.A. Kuzhel, G.V. Matyushin, R.S. Karpov (Tomsk and Krasnoyarsk, RU)

Ascending aorta wall deformation in hypertensive patients. A speckle tracking imaging study

Acute cardiac functional and mechanical responses to isometric exercise in pre-hypertensive males
J.O. Driscoll, K. Taylor, J. Wiles, D. Coleman, R. Sharma (London and Canterbury, GB)

Reversibility with weight loss of early cardiovascular disease in overweight adolescents with intellectual and developmental disabilities: baseline characteristics

Obesity influences left atrial function in patients with paroxysmal atrial fibrillation undergoing percutaneous pulmonary vein isolation

Routine right ventricular longitudinal strain in patients with pulmonary hypertension
G.J. Morgado, A.C. Gomes, S. Alegria, L. Lopes, D. Repolho, M.J. Loureiro, P. Fazendas, H. Pereira (Almada, PT)

The value of strain echocardiography in evaluating right ventricle dysfunction in patients with acute pulmonary embolism
D. Nistor, V. Sirbu, M. Opris, K. Kantor, F. Comsa, G. Oltean (Targu Mures, RO)

Left atrial conduit dysfunction detected by strain and strain rate echocardiography increases incidence of ischemic stroke
B. Tejo, U. Bahrudin, M.A. Nugroho (Semarang, ID)
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www.escardio.org/EACVI
Friday Sessions
More and more complex structural heart disease interventions and electrophysiological procedures require a deep understanding of cardiac anatomy. Three-dimensional echocardiography is the most advanced imaging modality to visualize the anatomy of internal cardiac structures “in vivo”. A detailed knowledge of normal anatomy facilitates comprehension of various structural heart diseases. Participants are invited to take a journey through the normal heart using 3D transthoracic and transesophageal imaging. When useful, normal structures will be presented side-by-side with anatomic specimen. Imaging of the most common structural heart disease will be also shown.

Target audience: Imaging cardiologists, adult and paediatric cardiologists, interventional cardiologists, electrophysiologists

09:00 - 10:30
Imaging of cardiac anatomy
Presenter: F.F. Faletra (Lugano, CH)

11:00 - 12:30
Imaging of cardiac anatomy
Presenter: F.F. Faletra (Lugano, CH)

14:00 - 15:30
Imaging of cardiac anatomy
Presenter: F.F. Faletra (Lugano, CH)

16:00 - 17:30
Imaging of cardiac anatomy
Presenter: F.F. Faletra (Lugano, CH)
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chairperson</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 - 10:00</td>
<td>Evolution and current status of 3D TEE diagnosis illustrated by clinical cases.</td>
<td>J. Necas (Brno, CZ)</td>
</tr>
<tr>
<td>10:30 - 11:30</td>
<td>Evolution and current status of 3D TEE diagnosis illustrated by clinical cases.</td>
<td>J. Necas (Brno, CZ)</td>
</tr>
<tr>
<td>12:00 - 13:00</td>
<td>Evolution and current status of 3D TEE diagnosis illustrated by clinical cases.</td>
<td>J. Necas (Brno, CZ)</td>
</tr>
<tr>
<td>14:00 - 15:00</td>
<td>Automatic 3D left heart volumetry, a true differentiator in LV and LA quantification.</td>
<td>L. Perez De Isla (Madrid, ES)</td>
</tr>
<tr>
<td>15:30 - 16:30</td>
<td>Automatic 3D left heart volumetry, a true differentiator in LV and LA quantification.</td>
<td>L. Perez De Isla (Madrid, ES)</td>
</tr>
<tr>
<td>17:00 - 18:00</td>
<td>Automatic 3D left heart volumetry, a true differentiator in LV and LA quantification.</td>
<td>L. Perez De Isla (Madrid, ES)</td>
</tr>
</tbody>
</table>
Friday 8 December 2017 - Morning Sessions

08:30 - 10:00 Main Session

**Intervention on the atrio ventricular valves**

Chairpersons: M. Desai (Cleveland, US); D.P. Pellerin (London, GB)

08:30 All the mitral valve suitable for percutaneous repair?  
E. Brochet (Paris, FR)

08:52 Tricuspid valve and the percutaneous interventions.  
E. Agricola (Milan, IT)

09:15 Imaging techniques for implanting the devices.  
M.J. Swaans (Hedel, NL)

09:37 Imaging for the AtrioVentricular percutaneous prosthesis.  
M. Zuber (Othmarsingen, CH)

08:30 - 10:00 Clinical Imaging

**Advances in the EP lab I. When the cardiac imager meets the electrophysiologist: focus on atrial fibrillation**

Chairpersons: O.A.B. Breithardt (Kassel, DE); P.P. Adragao (Carnaxide, PT)

08:30 Incorporating ESC guidelines and EACVI recommendations into clinical practice.  
A.M. Silva Ferreira (Lisbon, PT)

08:52 Imaging and AF ablation: conventional methods and beyond.  
A. Hagendorff (Leipzig, DE)

09:15 Imaging and LA appendage closure –what images and measurements to the interventionalist?  
G. Pressman (Philadelphia, US)

09:37 Coagulation, new oral anticoagulation and new contra-anticoagulation.  
J.A.C. Morais (Leiria, PT)

08:30 - 10:00 Symposium

**Tricuspid valve in 2017: no longer forgotten**

Joint session with the Working Group of Echocardiography of the German Cardiac Society

Chairpersons: R.S. Von Bardeleben (Mainz, DE); Y. Topilsky (Telaviv, IL)

08:30 Imaging the tricuspid valve: state of the art.  
A.R. Tamm (Mainz, DE)

08:52 Quantification and pathophysiology of tricuspid regurgitation.  
C. Hammerstingl (Cologne, DE)

09:15 Surgical solution to TR.  
F. Maisano (Zurich, CH)

09:37 Transcatheter therapy for TR.  
J. Mascherbauer (Vienna, AT)

08:30 - 10:00 Teaching Course

**Advanced echo techniques I: quantitation of cardiac function and mechanics**

Chairpersons: P. Perrone-Filardi (Naples, IT); M.S. Casella (Ramos Mejia, AR)

Teaching courses are specifically dedicated to an audience aiming to improve its knowledge and understanding and perfect its skills in a main topic of the Core curriculum of the EACVI.

08:30 Myocardial fibers and cardiac mechanics.  
P.P. Sengupta (Morgantown, US)

08:52 Tissue Doppler and 2D speckle-tracking.  
M. Cikes (Zagreb, HR)

09:15 3D deformation.  
R. Hoffmann (Lingen, DE)

09:37 Intraventricular mechanical dyssynchrony and dispersion.  
J.J. Voigt (Leuven, BE)
### Friday 8 December 2017 - Morning Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>08:30 - 10:00</td>
<td><strong>Symposium</strong></td>
<td>EVORA</td>
</tr>
</tbody>
</table>
| **The best of 2017 HIT: multimodality predictors of clinical hot points**  
(Heart Imagers of Tomorrow) |                      |          |
| Chairpersons: M. Cameli (Siena, IT); N.E. Hasselberg (Oslo, NO) |                      |          |
| 08:30         | Toxicity: multimodality analysis of chemotherapy induced cardiac damage. 895 |          |
|               | C. Santoro (Naples, IT)     |          |
| 08:52         | Arrhythmias: multimodality predictors of malignant arrhythmias. 896 |          |
|               | L. Baghdasaryan (Yerevan, AM) |          |
| 09:15         | CRT: multimodality predictors of CRT responders. 897 |          |
|               | B.W. Michalski (Ksawerow, PL) |          |
| 09:37         | Infarction: multimodality predictors of functional recovery after AMI. 898 |          |
|               | M. Motwani (Manchester, GB) |          |
| 08:30 - 10:00 | **Symposium**               | GUIMARAES|
| **Prosthetic valve endocarditis, diagnostics challenges and solutions**  
Joint session with the Nordic Working Group on Echocardiography |                      |          |
| Chairpersons: L. Rudski (Cote St Luc, CA); G. Habib (Marseille, FR) |                      |          |
| 08:30         | Prosthetic valve endocarditis: Scope of the problem and challenges. 899 |          |
|               | J.O. Beitnes (Oslo, NO)     |          |
| 08:52         | What imaging modalities can help TEE? ICE? CT? PET-CT? 900 |          |
|               | N.V. Vejlstrup (Copenhagen, DK) |          |
| 09:15         | The optimal diagnostic algorithm for prosthetic valve endocarditis? 901 |          |
|               | G. Habib (Marseille, FR)     |          |
| 09:37         | The use of PET-CT in endocarditis. 902 |          |
|               | A. Saraste (Turku, FI)       |          |
| 08:30 - 10:00 | **Symposium**               | GUARDA   |
| **Imaging predictors for outcome** |                      |          |
| Chairpersons: T. Bharucha (Southampton, GB); C. Fleishman (Orlando, US) |                      |          |
| 08:30         | Fetal markers of postnatal outcome: borderline left heart 903 |          |
|               | J. Simpson (London, GB)      |          |
| 08:52         | Imaging for risk stratification for SCD in tetralogy of Fallot 904 |          |
|               | M. Greutmann (Zurich, CH)    |          |
| 09:15         | Ebstein: before and after cone operation: case selection 905 |          |
|               | B.W. Eidem (Rochester, US)   |          |
| 09:37         | Imaging predictors for outcome in systemic RV 906 |          |
|               | G.P. Diller (Muenster, DE)   |          |
| 08:30 - 10:00 | **Rapid Fire Abstract**     | AGORA    |
| **New insights in diastology** |                      |          |
| Chairpersons: P.N. Marino (Novara, IT); M.J. Garcia (Bronx, US) |                      |          |
| 08:30         | Panel of experts: 907 |          |
|               | J.-W. Ha (Seoul, KR); A.G. Fraser (Cardiff, GB) |          |
| 08:30         | Impact of new recommendations in the evaluation of left ventricular diastolic function by echocardiography 908 |          |
|               | L. Sanchis Ruiz, R. Andrea, C. Falces, S. Poyatos, B. Vidal, M. Sitges (Barcelona, ES) |          |
| 08:39         | Resting echocardiography and biomarkers predict abnormal LV diastolic response and outcome in heart failure with preserved ejection fraction 909 |          |
|               | W. Kosmala, M. Przewlocka-Kosmala, T.H. Marwick (Wroclaw, PL; Melbourne, AU) |          |
| 08:48         | Effect of age, sex, and cardiovascular risk factors on systolic and diastolic myocardial deformation Results from the population-based STAAD cohort study 910 |          |
### Rapid Fire Abstract

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors and Affiliations</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:15</td>
<td>Left atrial rather than left ventricular impaired mechanics are associated with the pro-fibrotic ST2 marker and outcomes in Heart Failure with Preserved Ejection Fraction - A prospective multicenter</td>
<td>A.I. Nagy, C. Hage, E. Donal, J.C. Daubert, B. Merkely, C. Linde, L.H. Lund, A. Manouras (Budapest, HU; Stockholm, SE; Rennes, FR)</td>
</tr>
<tr>
<td>09:33</td>
<td>Improved estimate of left ventricular filling pressure by left atrial and left ventricular strain imaging</td>
<td>O.S. Andersen, E.W. Remme, A.K. Andreassen, K. Broch, H. Skulstad, E. Gude, O.A. Smiseth (Oslo, NO)</td>
</tr>
<tr>
<td>09:42</td>
<td>Effect of sodium-glucose cotransporter 2 inhibitor on vascular endothelial function and diastolic function in patients with heart failure with preserved ejection fraction (HFpEF)</td>
<td>T. Sakai, S. Miura (Kitakyusyu and Fukuoka, JP)</td>
</tr>
<tr>
<td>09:51</td>
<td>Effect of aldosterone antagonism on active and passive determinants of LV diastolic filling and exercise intolerance in heart failure with preserved ejection fraction</td>
<td>M. Przewlocka-Kosmala, W. Kosmala, T.H. Marwick (Wroclaw, PL; Melbourne, AU)</td>
</tr>
</tbody>
</table>

### Workshop TOE Room

**Focus on critical patient in CCU**

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

<table>
<thead>
<tr>
<th>Time</th>
<th>Presenters:</th>
<th>Authors and Affiliations</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>A. Salustri (Abu Dhabi, AE); A. Moreo (Milan, IT)</td>
<td>A. Salustri (Abu Dhabi, AE); A. Moreo (Milan, IT)</td>
</tr>
</tbody>
</table>

### Special Event GUARDA

**EACVI General Assembly**

### Special Session AGORA

**High-tech corner session 1**

Session focusing on the most up-to-date technology

<table>
<thead>
<tr>
<th>Time</th>
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</tr>
</thead>
<tbody>
<tr>
<td>10:00</td>
<td>Challenges and opportunities in image based modeling and simulation of the heart—Can echo help?</td>
<td>A. Hernandez (Rennes, FR)</td>
</tr>
<tr>
<td>10:15</td>
<td>Discussion/Q&amp;A.</td>
<td></td>
</tr>
<tr>
<td>10:20</td>
<td>Patient specific modeling in LBBB patients: from MRI to in-silicon models.</td>
<td>F. Maffessanti (Lugano, CH)</td>
</tr>
<tr>
<td>10:35</td>
<td>Discussion/Q&amp;A.</td>
<td></td>
</tr>
<tr>
<td>10:40</td>
<td>Prediction of cardiac resynchronization therapy outcome through the analysis of the 3D coronary sinus lead tip trajectory.</td>
<td>C. Corsi (Bologna, IT)</td>
</tr>
<tr>
<td>10:55</td>
<td>Discussion/Q&amp;A.</td>
<td></td>
</tr>
</tbody>
</table>
### Clinical cases moderated - Congenital heart disease

**Chairpersons:** A. Van Den Bosch (Rotterdam, NL); N. Hakacova (Lund, SE)

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
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</thead>
<tbody>
<tr>
<td>Adult incomplete Shone complex</td>
<td>A.A. Kandil</td>
</tr>
<tr>
<td>The determination of atrial septal defect device by implanted transcatheter method on the the left ventricular outflow tract, in an asymptomatic patient.</td>
<td>M. Cosgun</td>
</tr>
<tr>
<td>Late accidentally discovered Gerbode defect mistaken for severe pulmonary hypertension</td>
<td>A. Fareed</td>
</tr>
<tr>
<td>Double outlet right ventricle with malposed great arteries and atrioventricular discordance in a newborn</td>
<td>G. Delle Donne</td>
</tr>
<tr>
<td>A patient with double inlet left ventricle reaching adulthood without surgery</td>
<td>S. Akturk</td>
</tr>
<tr>
<td>A teenager with ventricular hypertrophy, dilation, and late gadolinium enhancement</td>
<td>M.E. Amaral</td>
</tr>
</tbody>
</table>

### Cardiac Imaging Quiz 2 (CT and CMR) - Challenging cases in Cardiac Imaging
Mobile App - Vote and Ask a Question

**Chairpersons:** A.M.G. Almeida (Lisbon, PT); R. Nijveldt (Amsterdam, NL)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:10</td>
<td>Mobile App interactive session.</td>
</tr>
<tr>
<td>10:23</td>
<td>Puzzling images of cardiac magnetic resonance.</td>
</tr>
<tr>
<td>10:36</td>
<td>Diagnostic riddles in Cardiac CT cases.</td>
</tr>
</tbody>
</table>

### How to stay updated on cardiovascular imaging

**Chairperson:** P. Maurovich-Horvat (Budapest, HU)

*How to session provides practical details and tools or tips and tricks on a specific topic related to the research. These sessions are built to help attendees to improve their experiences to complete successfully research project: from founding and grant application, to data analysis, results presentation and publication.*

<table>
<thead>
<tr>
<th>Time</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:10</td>
<td>M.H. Miglioranza (Porto Alegre, BR)</td>
</tr>
</tbody>
</table>

### Imaging and Transcatheter Aortic Valve Replacement (TAVR)

**Chairpersons:** J.L. Zamorano Gomez (Madrid, ES); R. Rosenhek (Vienna, AT)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>11:00</td>
<td>Multi-modality imaging for patient selection.</td>
</tr>
<tr>
<td>11:22</td>
<td>Imaging during the procedure.</td>
</tr>
<tr>
<td>11:45</td>
<td>Periprosthetic regurgitation assessment.</td>
</tr>
<tr>
<td>12:07</td>
<td>How to deal with remaining symptoms following TAVR?</td>
</tr>
</tbody>
</table>

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Friday 8 December 2017 - Morning Sessions

11:00 - 12:30 Clinical Imaging PORTO

**Advances in the EP lab II. When the cardiac imager meets the electrophysiologist: focus on ventricular arrhythmias and dysfunction**

Chairpersons: G. Hindricks (Leipzig, DE); P.P. Adragao (Carnaxide, PT)

- **11:00** Incorporating guidelines and recommendations into clinical practice. 
  O.A.B. Breithardt (Kassel, DE)  
  936

- **11:22** Imaging in ischemic and non-ischemic cardiomyopathies: anatomical substrate assessment. 
  C. Manisty (London, GB)  
  937

- **11:45** Imaging in the selection and programming of CRT. 
  E. Galli (Rennes, FR)  
  938

- **12:07** Machines in our hearts: old and new electrical devices. 
  G. Hindricks (Leipzig, DE)  
  939

11:00 - 12:30 Debate Session FARO

**Dr Jeckyll and Mr Hyde**

Chairpersons: O. Kamp (Amsterdam, NL); J.C. Plana (Houston, US)

- **11:00** Invasive coronary angiography. Helpful in every patient, useless in many patient. 
  O. Gaemperli (Zurich, CH)  
  940

- **11:45** Cancer treatment-related cardiotoxicity. Echocardiography is all I need. I need multi-modality imaging. 
  S. Ederhy (Paris, FR)  
  941

11:00 - 12:30 Teaching Course COIMBRA

**Advanced echo techniques II: basics, indications, protocols and interpretation**

Chairpersons: Z. Vered (Zerifin, IL); N. Ajmone Marsan (Leiden, NL)

*Teaching courses are specifically dedicated to an audience aiming to improve its knowledge and understanding and perfect its skills in a main topic of the Core curriculum of the EACVI.*

- **11:00** 2D/3D transesophageal echocardiography. 
  M. Pepi (Milan, IT)  
  942

- **11:22** Stress echocardiography in ischemic heart disease. 
  R. Senior (London, GB)  
  943

- **11:45** Stress echocardiography in nonischemic heart disease. 
  J.-W. Ha (Seoul, KR)  
  944

- **12:07** Contrast echocardiography. 
  R. Winter (Stockholm, SE)  
  945

11:00 - 12:30 Symposium EVORA

**Pericardial imaging state of mind**

Joint session with the American Society of Echocardiography (ASE)

Chairpersons: A.D. Ristic (Belgrade, RS); A. Klein (Cleveland, US)

- **11:00** Physiopathology of pericardial disease: what we learn from imaging? 
  P. Cremer (Shaker Heights, US)  
  946

- **11:22** Acute pericardial disease: role of multimodality imaging. 
  D.P. Pellerin (London, GB)  
  947

- **11:45** Recurrent pericardial disease: do we need imaging to avoid it? 
  M. Imazio (Torino, IT)  
  948

- **12:07** Constrictive pericardial disease: a difficult diagnosis, a complex entity. 
  J.K. Oh (Rochester, US)  
  949
### Friday 8 December 2017 - Morning Sessions

**11:00 - 12:30 Symposium**

**Echocardiography in the intensive care unit. From acute heart failure to cardiogenic shock**

*Joint session with the Working Group on Echocardiography and other Imaging modalities of the Romanian Society of Cardiology*

**Chairpersons:** B.A. Popescu (Bucharest, RO); R.O. Jurcut (Bucharest, RO)

<table>
<thead>
<tr>
<th>Time</th>
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</tr>
</thead>
<tbody>
<tr>
<td>11:00</td>
<td>Role of echocardiography in the acute heart failure guidelines 2016.</td>
<td>I.M. Coman (Bucharest, RO)</td>
</tr>
<tr>
<td>11:22</td>
<td>Left ventricular systolic function in the acute setting: which parameters to follow?</td>
<td>D. Vinereanu (Bucharest, RO)</td>
</tr>
<tr>
<td>11:45</td>
<td>Acute right ventricular failure: from imaging to treatment.</td>
<td>G. Claessen (Leuven, BE)</td>
</tr>
<tr>
<td>12:07</td>
<td>IABP, Impella ECMO or what else?</td>
<td>S. Price (London, GB)</td>
</tr>
</tbody>
</table>

**11:00 - 12:30 Debate Session**

**Congenital heart disease - Imaging for the 21st century**

*Joint session with the American Society of Echocardiography (ASE)*

**Chairpersons:** O. Miller (London, GB); M.K. Friedberg (Toronto, CA)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>11:00</td>
<td>Has advanced multimodality imaging had any effect on patient’s outcome?</td>
<td>L. Mertens (Toronto, CA)</td>
</tr>
<tr>
<td>11:22</td>
<td>Are «Congenital heart disease imaging specialists» value for money?</td>
<td>C.J. McMahon (Dublin, IE)</td>
</tr>
<tr>
<td>11:45</td>
<td>3D imaging across the modalities and future directions.</td>
<td>K. Pushparajah (London, GB)</td>
</tr>
<tr>
<td>12:07</td>
<td>Journey from translational research to standardisation guidelines</td>
<td>P. Barker (Durham, US)</td>
</tr>
</tbody>
</table>

**11:00 - 12:30 Clinical Cases**

**Congenital heart disease from infant to adult**

**Chairpersons:** E.R. Valsangiaco Buechel (Zurich, CH); T. Bharucha (Southampton, GB)

Young clinicians will present their cases and experts will be asked to moderate the sessions, facilitate interaction with the audience, prompt discussions, challenge the presenters and the audience.

The main objective of the session is to learn from challenging clinical case scenarios

<table>
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<tbody>
<tr>
<td>11:00</td>
<td>Panel of experts:</td>
<td>W. Li (London, GB); B. Bonello (London, GB)</td>
</tr>
<tr>
<td>11:00</td>
<td>Familial cluster of non-compaction cardiomyopathy and Ebstein’s associated MYH7 mutation.</td>
<td>R. Pinto (Matosinhos, PT)</td>
</tr>
<tr>
<td>11:09</td>
<td>Corrected tetralogy of Fallot: a rare late finding</td>
<td>F. Montenegro Sa (Leiria, PT)</td>
</tr>
<tr>
<td>11:18</td>
<td>When commensal bacteria «leave» the skin in a rare case of cyanotic congenital heart disease</td>
<td>R.-I. Capota (Bucharest, RO)</td>
</tr>
<tr>
<td>11:27</td>
<td>An apparently simple case of decompensated heart failure?</td>
<td>S. Alegria (Lisbon, PT)</td>
</tr>
<tr>
<td>11:36</td>
<td>When a small hole becomes a big hole</td>
<td>C.Y. Wong (Hong Kong, HK)</td>
</tr>
<tr>
<td>11:45</td>
<td>Stroke in a patient with a rare congenital heart disease</td>
<td>B. Alcon Duran (Getafe, ES)</td>
</tr>
<tr>
<td>11:54</td>
<td>Transient ischemic attack in a young man with surgically corrected transposition of the great arteries</td>
<td>N. Garcia (Bilbao, ES)</td>
</tr>
<tr>
<td>12:03</td>
<td>Out of the frying pan and into the fire - the dilemma of thrombosis in Fontan</td>
<td>T. Marinho-Rito (Lisbon, PT)</td>
</tr>
<tr>
<td>12:12</td>
<td>Atrial conundrum in a rare case of dextrocardia, common atrium and totally anomalous pulmonary venous drainage</td>
<td>G. Delle Donne (Leeds, GB)</td>
</tr>
<tr>
<td>12:21</td>
<td>A rare and complex clinical case: double orifice mitral valve, bicuspid aortic valve and aortic coarctation</td>
<td>R. Verseckaite (Kaunas, LT)</td>
</tr>
</tbody>
</table>
Focus on prosthetic valves

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

11:00  Presenters:
       L.E. Sade (Ankara, TR); A. Bernard (Tours, FR)
Complementing imaging for better management across the CV continuum  
Sponsored by SERVIER

Chairpersons: F.J. Pinto (Lisbon, PT); P. Lancellotti (Liege, BE)

The objective of this session is to discuss the importance of imaging modalities in cardiovascular diseases. We will explore how drugs act on different targets to provide complementary benefits at different time points during disease progression and the need for personalized therapy. In heart failure, the SHIFT echocardiographic substudy evaluated the effects of ivabradine and showed marked reductions in LV volumes and a significant improvement in LVEF under treatment. In the management of angina, the combination of drugs with different mechanisms of action are more effective and can act early to prevent chronic dysfunction.

12:45 - 13:45 Satellite Symposium  
LISBOA

Introduction - Complementing imaging for better management.  
P. Lancellotti (Liege, BE)  
12:50  
Left ventricular filling pressure assessment: new insights.  
P. Lancellotti (Liege, BE)  
13:05  
Complementing optimal medical care with imaging and revascularization.  
Y.M. Lopatin (Volgograd, RU)  
13:20  
Evaluation of systolic function in heart failure.  
F.J. Pinto (Lisbon, PT)  
13:35  
Conclusion - Complementing imaging for better management.  
F.J. Pinto (Lisbon, PT)

12:45 - 13:45 Moderated Posters  
MODERATED POSTER AREA

Present and future of Nuclear Cardiology/Computed Tomography imaging for clinical purpose

Chairpersons: A. Gimelli (Pisa, IT); M.H. Al Mallah (Riyadh, SA)

Left atrial appendage closure guided by 3D printed patient-specific models  
P975

Prognostic relevance of subclinical coronary and carotid atherosclerosis in asymptomatic at-risk adult population  
P976

Mitral Valve Reverse Remodeling after Surgical Repair of Acquired Left Ventricular Aneurysms of Posterior versus Anterior Localization Assessed with Multislice Computed Tomography  
P977
N. Solowjowa, A. Meyer, Y. Hrytsyna, M. Pasic, V. Falk, C.H. Kmosal (Berlin, DE)

Role of visceral and subcutaneous fat in prediction of plaque composition by multi-slice computed tomography coronary angiography  
P978
M.A. Sabet, S. ElKaffas, S.W.G. Bakhourm, H.I. Kandil (Cairo, EG)

Interobserver variability in I-123 MIBG sympathetic imaging in advanced heart failure patients  
P979

Diagnostic accuracy of coronary ct angiography performed in 100 consecutive patients with coronary stents using a novel whole-organ high-definition ct scanner  
P980

Factors affecting progression of coronary atherosclerosis using MDCT  
P981

Accuracy of coronary computed tomographic angiography to detect obstructive coronary artery disease by using stress versus rest dataset in patients referred to stress computed tomographic perfusion.  
P982
New secrets revealed about cardiomyopathies

Chairpersons: F. Asch (Washington, US); R. Winter (Stockholm, SE)

Severe functional mitral regurgitation in dilated cardiomyopathy linked to more pronounced alterations in left ventricular twist mechanics. E. Kinova, A. Borizanova, N. Spasova, B. Krastev, A. Goudev (Sofia, BG)

2D-Speckle Tracking Echocardiography in Patients with acute cellular Rejection after orthotopic heart transplantation B. Schulze, B. Fujita, U. Schulz, K.T. Puhlmann, J. Gummert, L. Paluszkiwicz (Bad Oeynhausen, DE)

Morbidity-mortality in hypertrophic cardiomyopathy beyond sudden cardiac death - new clinical, imaging and genetic predictors and integration with novel scores A.C. Gomes, L.R. Lopes, I. Cruz, G. Morgado, S. Alegría, D. Caldeira, H. Pereira (Almada, PT)

The utility of a novel echocardiographic prediction model in prognostication of patients with light chain (AL) cardiac amyloidosis M. Subramanian, A. Shanmugam, V. Kumar, H. Ahamed, K. Pavithran, N. Matthew (Kochi, IN)

Right ventricular morphology and function in left ventricular non-compaction cardiomyopathy S.F. Stampfl, A. Gotschy, P. Kiarostami, T. Ozkartal, C. Gruner, M. Greutmann, M. Niemann, R. Manka, F.C. Tanner (Zurich, CH)


Favorable diastolic function and increased left ventricular volumes in hypertrophic cardiomyopathy patients engaging in vigorous exercise L.A. Dejgaard, O.H. Lie, T.F. Haland, M. Ribe, T. Edvardsen, K.H. Haugaa (Oslo, NO)

14:00 - 15:30 Main Session  LISBOA

Heart failure and ischemia
Mobile App - Vote and Ask a Question

Chairpersons: G. Maurer (Vienna, AT); R. Sicari (Pisa, IT)

14:00 Mobile App Interactive Session.
14:00 When and how should we look for viability?  
J.R. Lindner (Portland, US)
14:22 How to assess the impact of myocardial infarction on the mitral valve apparatus.  
E. Schwammenthal (Tel Hashomer, IL)
14:45 Importance of the RV for the management.  
M. Guazzi (San Donato Milanese, IT)
15:07 How to assess the impact of treatments.  
M. Cikes (Zagreb, HR)

14:00 - 15:30 Clinical Imaging  PORTO

Challenges in pulmonary hypertension: imaging matters!

Chairpersons: P. Nihoyannopoulos (London, GB); A. Garcia-Alvarez (Barcelona, ES)

14:00 What echocardiography could provide?  
M. Vannan (Atlanta, US)
14:22 We need correct answers: is this a pre or post capillary pulmonary hypertension?  
A.K. Andreassen (Oslo, NO)
14:45 Multi-modality imaging assessment of pulmonary hypertension.  
E.S. Tucay (Quezon, PH)
15:07 Conventional and new therapeutic developments.  
N. Galie (Bologna, IT)

14:00 - 15:30 Debate Session  FARO

Tea for two in the operating theater

Chairpersons: J.D. Thomas (Chicago, US); L.A. Pierard (Liege, BE)

14:00 MitraClip implantation: the imager expertise.  
E. Agricola (Milan, IT)
14:22 MitraClip implantation: the interventionist expertise.  
P. Denti (Milan, IT)
14:45 Aortic valve repair: the imager expertise.  
A.J. Berrebi (Issy Les Moulineaux, FR)
15:07 Aortic valve repair: the surgeon expertise.  
E. Lansac (Paris, FR)
**14:00 - 15:30 Teaching Course COIMBRA**

**Cardiac masses and sources of embolism**

**Chairpersons:** P. Colonna (Bari, IT); C. Ginghina (Bucharest, RO)

*Teaching courses are specifically dedicated to an audience aiming to improve its knowledge and understanding and perfect its skills in a main topic of the Core curriculum of the EACVI.*

14:00  Intracardiac thrombi.  
I. Stankovic (Belgrade, RS)  
14:22  Valvular and device-related sources of embolism.  
S.V. Pislaru (Rochester, US)  
14:45  Cardiac tumors.  
C.C. Beladan (Bucharest, RO)  
15:07  Vascular sources of embolism.  
A. Evangelista Masip (Barcelona, ES)

**14:00 - 15:30 Special Session EVORA**

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

**Chairpersons:** T. Edvardsen (Oslo, NO); V. Rigolin (Chicago, US)

*The 2017 Young Investigator Awardees from US (American Society of Echocardiography-ASE), Japan (Japanese Society of Echocardiography-JSE) and Asia (Asian Pacific Association of Echocardiography-AAE) will present their winning research.*

14:00  EuroEcho Lecture: «Why and how cardiac imaging has revolutionized the management of aortic stenosis».  
P. Pibarot (Quebec, CA)  
14:22  Discussion.  
F. Moccetti (Sam Jackson Park Road, US)  
14:52  Discussion.  
14:59  JSE: Young Investigator Awardee presentation: “Clinical Utility of Preload Stress Echocardiography to Predict Outcomes in Low Gradient Aortic Stenosis».  
K. Kusunose (Tokushima, JP)  
15:23  Discussion.

**14:00 - 15:30 Symposium GUIMARAES**

**Focus on FOCUS echo**

*Joint session with the Indian Academy of Echocardiography (IAE)*

**Chairpersons:** A. Hagendorff (Leipzig, DE); S. Senqupta (Nagpur, IN)

14:00  Education and training needed for FOCUS and Emergency echo.  
A.N. Neskovic (Belgrade, RS)  
14:22  FOCUS for improved diagnostics in everyday cardiology.  
S.C. Govind (Bangalore, IN)  
14:45  FOCUS on heart failure.  
S. Mankad (Rochester, US)  
15:07  FOCUS - a bad sight in the cardiac ICU.  
S. Price (London, GB)
### Multi-modality seminar: coronary abnormalities - Congenital and acquired

**Chairpersons:** A. Van Den Bosch (Rotterdam, NL); L. Lopez (Miami, US)

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>14:00</td>
<td>Imaging workflow for Kawasaki disease</td>
<td>S.K. Mathur (London, GB)</td>
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<tr>
<td>14:22</td>
<td>Imaging coronary arteries after the arterial switch operation</td>
<td>M. Cohen (Philadelphia, US)</td>
</tr>
<tr>
<td>14:45</td>
<td>Coronary fistulas and imaging for diagnosis and intervention.</td>
<td>F. Labombarda (Caen, FR)</td>
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</tbody>
</table>

### Rapid Fire Abstract

**Chairpersons:** H. Michelena (Rochester, US); J. Magne (Limoqes, FR)

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>14:00</td>
<td>Panel of experts:</td>
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<td></td>
<td></td>
<td>A.I. Nagy (Budapest, HU); I. Burwash (Ottawa, CA)</td>
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<tr>
<td>14:18</td>
<td>Global longitudinal strain early predicts improvement of left ventricular function and correlates with outcomes following transcatheter aortic valve implantation</td>
<td>R.I. Mincu, R.A. Janosi, A. Lind, P. Kahlert, F. Al-Rashid, A.A. Mahabadi, D. Vinereanu, T. Rassaf, M. Totzeck (Bucharest, RO; Essen, DE)</td>
</tr>
<tr>
<td>14:45</td>
<td>Aortic stenosis quantification using combined Doppler and computed tomography measurements. Correlation with invasive assessment.</td>
<td>G. Giannakopoulos, S. Noble, A. Frei, H. Muller (Geneva, CH)</td>
</tr>
</tbody>
</table>

Other sessions and abstracts are available in the document as well.
**14:00 - 15:30  Workshop  TOE Room**

**Focus on Mitraclip**

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

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenters</th>
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<tbody>
<tr>
<td>14:00</td>
<td>Presenters: E. Donal (Rennes, FR); V. Delgado (Leiden, NL)</td>
<td>1029</td>
</tr>
</tbody>
</table>

**15:30 - 16:30  Meet the Experts  AGORA**

**Extend the experience of two important past EACVI webinars**

Chairpersons: E. Alexanderson Rosas (Mexico, MX); D. Muraru (Padua, IT)

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<tr>
<th>Time</th>
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<th>Presenters</th>
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<tbody>
<tr>
<td>15:30</td>
<td>Challenges in hypertrophic cardiomyopathies. 1031</td>
<td>R.O. Jurcut (Bucharest, RO)</td>
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<tr>
<td>15:50</td>
<td>Discussion.</td>
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<tr>
<td>16:00</td>
<td>Challenges in the assessment of prosthetic valves. 1032</td>
<td>T. Le Tourneau (Nantes, FR)</td>
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<tr>
<td>16:20</td>
<td>Discussion.</td>
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**15:30 - 16:30  Moderated Posters  MODERATED POSTER AREA**

**Clinical cases moderated - A mass or a mess, let’s have a look!**

Chairpersons: M. Garbi (London, GB); M.J. Andrade (Lisbon, PT)

- Cardiac hydatidosis in a 57-year-old woman P1033
  - A. Sghaier (Sousse, TN)
- A cardiac mass P1034
  - M.I. Freixa (Lisbon, PT)
- Multiple right cardiac thrombi in Behcet’s syndrome P1035
  - A. Yehia (Alexandria, EG)
- Masking the mass P1037
  - M.M. Oo (Petaling Jaya, MY)
- Giant left circumflex coronary artery fistula to the coronary sinus P1038
  - M. Vieira (Sao Paulo, BR)

**15:40 - 16:25  How-to Session  PORTO**

**How to design and write a good scientific research study**

*EACVI HIT (Heart Imagers of Tomorrow)*

Chairperson: M. Galderisi (Naples, IT)

*How-to session provides practical details and tools or tips and tricks on a specific topic related to the research. These sessions are built to help attendees to improve their experiences to complete successfully research project: from founding and grant application, to data analysis, results presentation and publication.*

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<tr>
<th>Time</th>
<th>Session</th>
<th>Presenters</th>
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<tbody>
<tr>
<td>15:40</td>
<td>Presenter: M. Scherrer-Crosbie (Philadelphia, US)</td>
<td>1039</td>
</tr>
</tbody>
</table>
16:30 - 18:00 Main Session

The invasive validation of left ventricular filling pressures
*Mobile App - Vote and Ask a Question*

Chairpersons: P. Lancellotti (Liege, BE); S. Nakatani (Takarazuka, JP)

16:30 Mobile App Interactive Session.
16:30 Why and how do we need to estimate non invasive left ventricular filling pressures?
   S. Nagueh (Houston, US)
16:52 The 2016 ASE/EACVI recommendations on diastolic function.
   O.A. Smiseth (Oslo, NO)
17:15 The American experience.
   A. Klein (Cleveland, US)
17:37 The European experience: insights from the Euro-Filling Study.
   M. Galderisi (Naples, IT)

16:30 - 18:00 Clinical Imaging

LV hypertrophy: a disease of many faces

Chairpersons: K. Hristova (Sofia, BG); A.G. Fraser (Cardiff, GB)

16:30 Imaging in sarcomeric hypertrophic cardiomyopathy: what’s new?
   B.A. Popescu (Bucharest, RO)
16:52 Is this hypertensive heart disease or HCM?
   C. Shekhar (Edina, US)
   F. Schnell (Rennes, FR)
17:37 Fabry disease: don’t forget about it!
   F. Weidemann (Unna, DE)

16:30 - 18:00 Symposium

Functional mitral regurgitation: Update 2017
*Joint session with the Cardiovascular Imaging Department of the Brazilian Society of Cardiology*

Chairpersons: M. Garbi (London, GB); N. Piriou (Nantes, FR)

16:30 What is severe functional mitral regurgitation.
   M. Vieira (Sao Paulo, BR)
16:52 Added value of three dimensional echocardiography.
   S. Mankad (Rochester, US)
17:15 Should stress echocardiography be a must?
   A. Rabishoffsky (Rio De Janeiro, BR)
17:37 What do I need from Echo for mitral valve repair?
   X. Freixa Rofaster (Barcelona, ES)
### 16:30 - 18:00 Teaching Course

**COIMBRA**

**Non-invasive hemodynamic assessment by echocardiography**

Chairpersons: S. Price (London, GB); V. Rigolin (Chicago, US)

*Teaching courses are specifically dedicated to an audience aiming to improve its knowledge and understanding and perfect its skills in a main topic of the Core curriculum of the EACVI.*

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>16:30</td>
<td>Volume status and preload responsiveness.</td>
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<td>H. Soliman (London, GB)</td>
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<tr>
<td>16:52</td>
<td>Left ventricular hemodynamics in heart failure.</td>
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<tr>
<td></td>
<td>A. Nossikoff (Sofia, BG)</td>
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<tr>
<td>17:15</td>
<td>Pulmonary pressures and vascular resistance in pulmonary hypertension.</td>
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<td>A. Milan (Torino, IT)</td>
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<td>17:37</td>
<td>Cardiac tamponade and constrictive pericarditis.</td>
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<td>B. Cosyns (Brussels, BE)</td>
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### 16:30 - 18:00 Symposium

**EVORA**

**Aortopathy**

Chairpersons: D. Morris (Berlin, DE); A. Evangelista Masip (Barcelona, ES)

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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>16:30</td>
<td>Aortopathy, screening, genetic testing and follow up.</td>
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<td>A. Evangelista Masip (Barcelona, ES)</td>
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<tr>
<td>16:52</td>
<td>Multimodality imaging in patients with aortopathy.</td>
</tr>
<tr>
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<td>A. Van Den Bosch (Rotterdam, NL)</td>
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<tr>
<td>17:15</td>
<td>Aortopathy in pregnancy.</td>
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<td>M.-E. Estensen (Oslo, NO)</td>
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<td>17:37</td>
<td>Marfan Syndrome, its not only the aorta wich is affected.</td>
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<td>J.-I. Stein (Graz, AT)</td>
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</tbody>
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### 16:30 - 18:00 Symposium

**GUIMARAES**

**Cardiomyopathies and heart failure phenotypes**

*Joint session with ECOSIAC*

Chairpersons: J.A. Lowenstein (Buenos Aires, AR); N. Cardim (Lisbon, PT)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>16:30</td>
<td>HfPEF: different phenotypes, additive value of imaging techniques.</td>
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<td>E. Donal (Rennes, FR)</td>
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<td>16:52</td>
<td>Heart failure in heart valve disease.</td>
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<td>J.L. Cavalcante (Pittsburgh, US)</td>
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<td>17:15</td>
<td>Cardiomyopathies how improve on the etiology with imaging</td>
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<td>S. Spina (Ramos Mejia, AR)</td>
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<tr>
<td>17:37</td>
<td>How we assess the right ventricle in heart failure patients</td>
</tr>
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<td>X. Zhou (Beijing, CN)</td>
</tr>
</tbody>
</table>
### 16:30 - 18:00 Symposium GUARDA

**Advances in the non-invasive assessment of cardiac mechanics**

**Chairpersons:** B. Bijnen (Barcelona, ES); L. Herbots (Hasselt, BE)

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:30</td>
<td>Stretch-strain relations: a new non-invasive approach to myocardial contractility.</td>
<td>R. Jasaityte (Berlin, DE)</td>
</tr>
<tr>
<td>16:52</td>
<td>3D vs 2D echo strain: promise and reality.</td>
<td>A. Stoylen (Trondheim, NO)</td>
</tr>
<tr>
<td>17:15</td>
<td>3 MRI strain assessment: tagging, feature tracking, velocity encoding - is there a winner.</td>
<td>J.A.C. Lima (Baltimore, US)</td>
</tr>
<tr>
<td>17:37</td>
<td>A different way of looking at cardiac mechanics: The concept of the constant-volume heart.</td>
<td>M. Carlsson (Lund, SE)</td>
</tr>
</tbody>
</table>

### 16:30 - 18:00 Rapid Fire Abstract AGORA

**New methods in the echocardiographic assessment of cardiac function**

**Chairpersons:** O.A.B. Breithardt (Kassel, DE); A. Hagendorff (Leipzig, DE)

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
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<tbody>
<tr>
<td>16:30</td>
<td>Panel of experts:</td>
<td>J. Gorcsan (St. Louis, US); F.E. Rademakers (Leuven, BE)</td>
</tr>
<tr>
<td>16:57</td>
<td>The Performance of CT coronary angiography derived correction factor (ACTIV-LVOT Study) in assessing aortic valve disease by echocardiography</td>
<td>E. Alskaf, T. Gupta, A. Kardos (Milton Keynes, GB)</td>
</tr>
<tr>
<td>17:06</td>
<td>Dilatation of aortic root in patients after kidney transplantation</td>
<td>M. Obremska, M. Boratynska, M. Szymczak, D. Zysko, M. Klinger (Wroclaw, PL)</td>
</tr>
<tr>
<td>17:24</td>
<td>Hepatic steatosis assessed quantitatively with echocardiography correlates with liver biopsy in severely obese patients</td>
<td>G. Styczynski, P. Kalinowski, L. Michalowski, R. Paluszewizkiew, B. Ziarkiewicz-Wroblewska, K. Zieniwcwicz, P. Sobieraj, C. Szmieljekls (Warsaw, PL)</td>
</tr>
<tr>
<td>17:42</td>
<td>Early effect of balloon mitral valvuloplasty on left atrial reverse remodelling in mitral stenosis patients</td>
<td>R.K. Ola, C.B. Meena, S.M. Sharma, S. Ramakrishnan, A. Agarwal, O.P. Khoya, S. Bharagava (Jaipur and New Delhi, IN)</td>
</tr>
</tbody>
</table>
16:30 - 18:00  Workshop  
TOE Room

**Focus on ASD closure**

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

16:30  **Presenters:**  
E. Agricola (Milano, IT); R. Teixeira (Coimbra, PT)

18:00 - 19:00  Special Session  
LISBOA

**Echo@Jeopardy**

**Chairpersons: B. Cosyns (Brussels, BE); P. Lancellotti (Liege, BE)**

We are turning the popular Jeopardy game into a cardiovascular imaging challenge.

18:00  **Master slide Echo@Jeopardy.**  
18:00  **Echo at Jeopardy - Presenters:**  
S. Matskeplishvili (Moscow, RU); M. Cameli (Siena, IT)

18:00  **EACVI Team.**  
E. Donal (Rennes, FR); M. Galderisi (Naples, IT); A.N. Neskovic (Belgrade, RS); V. Delgado (Leiden, NL)

18:15  **Local host Team.**  
N. Cardim (Lisbon, PT); A.M.G. Almeida (Lisbon, PT); F.M. Macedo (Porto, PT); C. Sousa (Porto, PT)

18:30  **The rest of the world Team.**  
J.C. Plana (Houston, US); S. Moharem-Elgamal (Cairo, EG); M. Takeuchi (Kitakyushu, JP); H. Soliman (Abu Dhabi, AE)

18:45  **Case coordinators.**  
E. Donal (Rennes, FR); N. Cardim (Lisbon, PT); J.C. Plana (Houston, US)
Friday Posters
Friday 8 December 2017 - Posters

HIT MODERATED POSTER SESSION
All posters are on display from 08:30 to 18:00.
12:45 - 13:45 - Lunchtime HIT Poster hosts.
Meet the presenters by their poster

CLINICAL CASE MODERATED POSTER SESSION
MORNING
All moderated posters are on display from 08:30 to 12:30.
10:00 - 11:00 - Meet the presenters by their poster.
AFTERNOON
All posters are on display from 14:00 to 18:00.
15:30 - 16:30 - Meet the presenters by their poster.

ABSTRACT MODERATED POSTER SESSION
All moderated posters are on display from 08:30 to 18:00.
12:45 - 13:45 - Meet the presenters by their poster.

ABSTRACT & CLINICAL CASE POSTER SESSIONS
MORNING
All posters are on display from 08:30 to 12:30.
10:00 - 11:00 - Meet the presenters by their poster.
AFTERNOON
All posters are on display from 14:00 to 18:00.
15:30 - 16:30 - Meet the presenters by their poster.

HIGH SCORE POSTER
Look out for these abstracts acknowledged by the reviewing committee.

Missed a presentation?
After the congress, abstracts will be available online and a selection of slide presentations will be available only to EACVI Members.
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IMPORTANT INFORMATION FOR PRESENTERS
MORNING SESSIONS:
Poster presenters must set up Poster between 08:00-08:30.
All posters not affixed by 10:00 may be considered as no-show.
Posters must be removed from the area between 12:30 - 13:00.

AFTERNOON SESSIONS:
Poster presenters must set up Poster between 13:30 - 14:00.
All posters not affixed by 15:30 may be considered as no-show.
Posters must be removed from the area between 18:00-18:30.

Abstract presenters can consult the POSTER ASSISTANCE DESK for further information and to retrieve their Certificate of Presentation.
ST2 and myocardial fibrosis in aortic valve stenosis

Right ventricular ejection fraction measured by three-dimensional echocardiography predicts survival better than FAC and TAPSE in patients with various cardiac diseases

Role of magnetic resonance imaging in cardiac tumours: a five years single centre experience
F. Bianco, V. Bucciarelli, C. Mantini, S. Gallina, R. De Caterina, G.D. Aquaro (Chieti and Pisa, IT)

Impact of aortic valve reconstruction with autologous pericardium on left ventricular performance in patients with severe aortic stenosis: comparison with aortic valve replacement

Uncorrected single ventricle adults and Eisenmenger syndrome: two different pathologies with the same treatment?
D.M. Dorobantu, R. Enache, R. Badea, T. Radu, L. Predescu, P. Platon, C. Ginghina, B.A. Popescu, I.M. Coman (Bucharest, RO)
**Clinical Case Poster session 4**

From hepatic carcinoma to heart failure: a rare late complication with a devastating cascading effect
A.C. Guta (Bucharest, RO)

A clinical case of pulmonary artery sarcoma
I. Arkhipova (Astrakhan, RU)

Intracardiac mass from hepatocellular carcinoma mimicking right heart failure
J. Okafor (London, GB)

Two problems, one cause
N.M. Fotea (Bucharest, RO)

A thrombus straddling a patent foramen ovale: Quo vadis?
R.A. Guerreiro (Evora, PT)

When there is more than meets the eye: a challenging case of myocardial infarction
C.C. Neagu (Bucharest, RO)

Giant left atrial appendage thrombus
J. Rigueira (Lisbon, PT)

Assessment of coronary artery flow during routine echocardiography can reveal significant stenosis in an asymptomatic patient
A. Zagatina (St. Petersburg, RU)

The silent complications
M. Hassan Abdelnabi (Alexandria, EG)

Peculiar evolution of an acute myocardial infarction complicated with left ventricular apical rupture
M.L. Luchian (Ploiesti, RO)

Acute coronary artery occlusion - is it enough to rely on ECG and troponin values?
H.S. Schroer (Berlin, DE)

Portrait of a complex mitral valve leak
B. Carbonell Prat (Espirreguera, ES)

Torrential tricuspid regurgitation improved with coronary intervention: An insight from three-dimensional echocardiography
N. Hamid (Singapore, SG)

Right sided infective endocarditis: don’t miss the Eustachian valve
I. Dentamaro (Bari, IT)

A very rare case report: left atrial wall vegetation after dental procedure
S.E.D.A. Tan Kurklu (Ankara, TR)

Relapsing Q fever infective endocarditis
R. Ilhao Moreira (Coimbra, PT)

Immediate effect of a successful MitraClip procedure on mitral annulus geometry in a patient with secondary severe mitral regurgitation
S. Cimino (Roma, IT)

Alone Mitraclip mimicking commissural annuloplasty
S. Stella (Vimodrone, IT)

An unusual cause of dyspnea
S.M.H. El Tayeb (Dammam, SA)

An unusual endomyocardial fibrosis; case report
K. Ahmed (Galway, IE)

Atypical presentation of a rare systemic vasculitis
M. Trepa (Porto, PT)

Superior vena cava obstruction as a complication of pacemaker therapy- the role of echocardiography in diagnosis and follow up of the patient.
A. Wojtkowska (Lublin, PL)

A 11 years old boy presenting with exertional intolerance and ankle edema
I.H. Tai (Kaohsiung, TW)

Looking for comets, why cardiologists should do it in congestive HF.
C. Piazzai (Firenze, IT)

Acute pericarditis as a possible complication of infliximab therapy
C. Dugo (Verona, IT)

Purulent cardiac tamponade due to Acinetobacter pericarditis in patients with tuberculous pleural effusion and concurrent detection of lung tumor
N. Dalimunthe (Medan, ID)
Barrier on wrong side  
R. Parikh (Anand, IN)

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A.M. Pascal (Bucharest, RO)

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J. De Sousa Bispo (Faro, PT)

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A. Leme Neto (Curitiba, BR)

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Z. Mladenovic (Belgrade, RS)

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3D printing facilitates left atrial appendage device closure

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LA strain does not predict atrial fibrillation recurrence after electrical cardioversion: a systematic review and meta-analysis
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Saturday Sessions
**Saturday 9 December 2017 - Morning Sessions**

### Symposium

**PORTO**

**Methods and value of cardiotoxicity assessment in oncologic disease**

**Chairpersons:** M. Scherrer-Crosbie (Philadelphia, US); M. Galderisi (Naples, IT)

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### Teaching Course

**COIMBRA**

**Standard and advanced echocardiographic evaluation in cardiomyopathies**

**Chairpersons:** A.S. Pearlman (Seattle, US); F.J. Pinto (Lisbon, PT)

*Teaching courses are specifically dedicated to an audience aiming to improve its knowledge and understanding and perfect its skills in a main topic of the Core curriculum of the EACVI.*

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<td>Infiltrative diseases.</td>
<td>L. Badano (Padova, IT)</td>
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<td>09:37</td>
<td>Storage diseases.</td>
<td>A. Linhart (Prague, CZ)</td>
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08:30 - 10:00 Symposium

New horizons in congenital heart imaging

Chairpersons: L. Mertens (Toronto, CA); K. Pushparajah (London, GB)

08:30 Vortex imaging and particle imaging velocimetry: role in congenital heart disease? 1432
G. Pedrizzetti (Prato, IT)
08:52 Fusion imaging 1433
S. Hascoet (Paris, FR)
09:15 Fetal cardiac MRI 1434
M. Seed (Toronto, CA)
09:37 Shear wave imaging: update and application in congenital heart disease 1435
O. Villedain (Paris, FR)

08:30 - 10:00 Clinical Cases

The image you never saw but it exists!

Chairpersons: A.N. Neskovic (Belgrade, RS); S.V. Pislaru (Rochester, US)

Young clinicians will present their cases and experts will be asked to moderate the sessions, facilitate interaction with the audience, prompt discussions, challenge the presenters and the audience.

The main objective of the session is to learn from challenging clinical case scenarios

08:30 Panel of experts: 1436
M. Sitges (Barcelona, ES); K. Yiangou (Nicosia, CY)
08:30 Giant cardiac tumor in a newborn. 1437
M.E. Amaral (Coimbra, PT)
08:39 Role of multimodality imaging in diagnosis, decision making and successful device closure of giant left ventricular pseudoaneurysm 1438
A. Karande (Indore, IN)
08:48 Unusual cause of aborted sudden cardiac death 1439
G. Pestana (Porto, PT)
08:57 An unusual cause of acute coronary syndrome 1440
M. Augusto Goncalves (Lisbon, PT)
09:06 Right atrium angiosarcoma: an unexpected cause of stroke 1441
L. Marques (Penafiel, PT)
09:15 Straddling atrial thrombus associated with pulmonary embolism and acute coronary syndrome 1442
L. Lanzoni (Negrar, IT)
09:24 Dyspnea in 67-year-old man with stage IV prostatic adenocarcinoma. 1443
G. Ramirez-Escudero Ugalde (Bilbao, ES)
09:33 Demonstrable intra-cardiac thrombus in a new case of classical homocystinuria 1444
S.T. Tan (London, GB)
09:42 Aortic fibroelastoma as a peculiar aetiology of myocardial ischemia 1445
V. Spini (Empoli, IT)
09:51 A ghost in the heart 1446
M. Bizot (Nancy, FR)
10:00 - 11:00 Special Session

**Hightech corner session 2**
Session focusing on the most up-to-date technology

**Chairpersons:** V. Mor-Avi (Chicago, US); J.P. Carpenter (Burley, GB)

- **10:00** Fusion of 3D echo strain and CT angiography
- **10:15** Discussion/Q&A.
- **10:20** Multimodal image fusion for cardiac resynchronization therapy optimization.
  - A. Simon (Rennes, FR)
- **10:35** Discussion/Q&A.
- **10:40** Current trends in 4D flow MRI: towards clinical application.
  - G. Barone-Rochette (Grenoble, FR)
- **10:55** Discussion/Q&A.

10:00 - 11:00 Moderated Posters

**Congenital heart disease**

**Chairpersons:** X. Iriart (Pessac, FR); G. Di Salvo (London, GB)

- Personalized Three-Dimensional printing in one device closure for multiple atrial septal defects guided with thoracic echocardiography: feasibility and clinical effect
  - F. Fang, X. Qiu, W.B. Ouyang, S.Z. Wang, X.B. Pan (Beijing, CN)
- Normal values for left and right ventricular systolic strain in Caucasian children by two dimensional speckle-tracking echocardiography: little variations with age and somatic growth
  - M. Cantinotti, E. Franchi, M. Scalese, G. Corana, N. Assanta (Massa, IT)
- Intraventricular flow characterization by vector flow mapping: do energy distribution curves and wall shear stress provide incremental hemodynamic information in cardiomyopathy?
  - M. Craft, C. Casey, K. Bisselou, C. Erickson, R. Spicer, D. Danford, S. Kutty (Omaha and Twinsburg, OH, US)
- Three-dimensional changes of aortic geometry in Marfan syndrome beyond the aortic root: a 4D-MRI study
- Assessment of early diastolic filling dynamics in patients with repaired tetralogy of Fallot using semiautomatic analysis of propagation velocity
- Relationship between cardiovascular magnetic resonance assessment of native right ventricular outflow tract morphology and clinical status in adults late after tetralogy of fallot repair
  - A. Van De Bruaene, L. Benson, E. Horlick, R. Wald (Toronto, CA)
- Relationship of ventricular geometry, myocardial motion, and pressure in patients with repaired tetralogy of Fallot
- Multimodality assessment of the neoaortic valve regurgitation in adolescents and young adults with transposition of the great arteries after the arterial switch operation.
Saturday 9 December 2017 - Morning Sessions

10:00 - 11:00 Moderated Posters MODERATED POSTER AREA

**Clinical cases moderated - Waiting for Euro-Endo results: endocarditis clinical cases**

Chairpersons: F. Asch (Washington, US); P.R. Fazendas (Almada, PT)

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Reference</th>
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</thead>
<tbody>
<tr>
<td>Huge pseudonaneurysm in prosthetic valve endocarditis</td>
<td>S. Aguiar Rosa (Lisbon, PT)</td>
<td>P1458</td>
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<tr>
<td>Left sided endocarditis causing recurrent right sided emboli</td>
<td>M. Korani (Manchester, GB)</td>
<td>P1459</td>
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<td>Ghosts do exist: a challenging device-related endocarditis clinical case</td>
<td>A.C. Freitas (Lisbon, PT)</td>
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<td>and pulmonary abscess due to Cellulomonas</td>
<td>K. Thomas (Reading, GB)</td>
<td>P1461</td>
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<td>An infected network</td>
<td>J. Hennequin (Nancy, FR)</td>
<td>P1462</td>
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<tr>
<td>Isolated left atrial mural endocarditis complicated by endogenous endophthalmitis</td>
<td>A.E. Viiiac (Bucharest, RO)</td>
<td>P1463</td>
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10:10 - 10:55 How-to Session PORTO

**How to analyze nuclear cardiology data - tips for beginners**

*EACVI HIT (Heart Imagers of Tomorrow)*

Chairperson: O. Gaemperli (Zurich, CH)

How-to session provides practical details and tools or tips and tricks on a specific topic related to the research. These sessions are built to help attendees to improve their experiences to complete successfully research project: from founding and grant application, to data analysis, results presentation and publication.

10:10 Presenter: R. Liga (Pisa, IT) 1464

11:00 - 12:30 Special Session PORTO

**EuroEcho-Imaging 2017 highlights**

Chairpersons: B.A. Popescu (Bucharest, RO); T. Edvardsen (Oslo, NO)

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter(s)</th>
<th>Reference</th>
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<tbody>
<tr>
<td>11:00</td>
<td>Heart failure</td>
<td>K.H. Haugaa (Oslo, NO)</td>
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<tr>
<td>11:15</td>
<td>New technologies</td>
<td>D. Muraru (Padua, IT)</td>
<td>1466</td>
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<td>11:30</td>
<td>Valvular heart disease</td>
<td>J.S. Dahl (Odense C, DK)</td>
<td>1467</td>
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<td>11:45</td>
<td>Congenital heart disease</td>
<td>O. Miller (London, GB)</td>
<td>1468</td>
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<tr>
<td>12:00</td>
<td>Cardiac magnetic imaging</td>
<td>C. Bucciarelli-Ducci (Bristol, GB)</td>
<td>1469</td>
</tr>
<tr>
<td>12:15</td>
<td>Computed tomography/Nuclear cardiology</td>
<td>A. Gimelli (Pisa, IT)</td>
<td>1470</td>
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</tbody>
</table>
11:00 - 12:30 Symposium  

**Mitral regurgitation – how to approach?**  
*Joint session with the Working Group of Echocardiography of the Hellenic Cardiological Society*

Chairpersons: L. Rallidis (Argiropolis, GR); F. Antonini-Canterin (Pordenone, IT)

- **11:00** Mitral regurgitation quantification.  
  I. Ikonomidou (Athens, GR)  
- **11:22** Value of Cardiac Magnetic resonance for mitral regurgitation.  
  P. Cremer (Shaker Heights, US)  
- **11:45** Stress echo and mitral regurgitation.  
  D. Patsouras (Ioannina, GR)  
- **12:07** Echocardiography for guiding the treatment.  
  J.M. Song (Seoul, KR)

11:00 - 12:30 Symposium  

**Right Heart Failure**  
*Joint session with the European Association of Cardiovascular Imaging (EACVI) and the Asia-Pacific Association of Echocardiography (AAE)*

Chairpersons: J.K. Oh (Rochester, US); T. Kukulski (Zabrze, PL)

- **11:00** The comprehensive echo assessment of right ventricular failure.  
  D. Jakrapanichakul (Bangkok, TH)  
- **11:22** Right heart cardiomyopathies.  
  H. Yamada (Tokushima, JP)  
- **11:45** Right sided valvular heart disease.  
  Y.J. Kim (Seoul, KR)  
- **12:07** Pericardial diseases.  
  D.P. Pellerin (London, GB)

11:00 - 12:30 Symposium  

**Imaging for intervention in single ventricle patients**

Chairpersons: C.J. McMahon (Dublin, IE); A. Dragulescu (Toronto, CA)

- **11:00** Fetal cardiac intervention: Optimal imaging strategy before, during and after.  
  To be announced  
- **11:22** Imaging strategy along the single ventricle pathway  
  B. Bonello (London, GB)  
- **11:45** Imaging for extra-cardiac complications.  
  Y. Dori (Philadelphia, US)  
- **12:07** Imaging for interventions for complications in the Fontan circuit.  
  S.V. Babu-Narayan (London, GB)
Saturday Posters
CLINICAL CASE MODERATED POSTER SESSION
All moderated posters are on display from 08:30 to 12:30.
10:00 - 11:00 - A little bit of everything.

ABSTRACT MODERATED POSTER SESSIONS
All moderated posters are on display from 08:30 to 12:30.
10:00 - 11:00 - Meet the presenters by their poster.

ABSTRACT & CLINICAL CASE POSTER SESSIONS
MORNING POSTER SESSION
All posters are on display from 08:30 to 12:30.
10:00 - 11:00 - Meet the presenters by their poster.

HIGH SCORE POSTER
Look out for these abstracts acknowledged by the reviewing committee.

Missed a presentation?
After the congress, abstracts will be available online and a selection of slide presentations will be available only to EACVI Members.
More information on the ESC-EACVI Stand.

IMPORTANT INFORMATION FOR PRESENTERS
MORNING SESSIONS:
Poster presenters must set up Poster between 08:00 - 08:30.
All posters not affixed by 10:00 may be considered as no-show.
Posters must be removed from the area between 12:30 - 13:00.

Abstract presenters can consult the POSTER ASSISTANCE DESK for further information and to retrieve their Certificate of Presentation.
08:30 - 12:30 Poster Session

Clinical Case Poster session 6

To be or not to be...when a mass is the problem
A. Degiovanni (Novara, IT)

3D echocardiographic description of the anatomical features of an unusual left atrial myxoma: comparison with different imaging modalities.
K. Allassas (Manama, BH)

Put down the scalpel, case report
K.H.A.L.I.D.M. Ahmed (Galway, IE)

A large intracardiac tumor revealed by echo
N. Gouliaros (Thessaloniki, GR)

Unexpected detection of nonbacterial thrombotic endocarditis on mitral valve in a patient with atypical chest pain.
G. Barbati (Napoli, IT)

Dyspnoea, fatigue and an elusive cardiac mass: an echocardiographic approach
D. Bras (Amadora, PT)

Giant myxoma of the left atrium had caused mitral valve obstruction
M.V. Krestiyaninov (Ulyanovsk, RU)

A Very Rare Anomaly Detected Incidentally by Coronary Angiography: Right Coronary Artery Originated from Left Coronary Artery
T.A. Aktemur (Istanbul, TR)

Anomalous origin of the right coronary artery from the left sinus of valsalva: a multi-modality approach
C. Oliveira Da Silva (Tullinge, SE)

Anabolic steroids, acute myocardial infarction and polycythemia
A. Mustafa (Cairo, EG)

Horrible, primary PCI of inferior myocardial infarction followed by diffuse ST segment elevation.
A. Mustafa (Cairo, EG)

The XValve: A rare clinical case of a Quadricuspid aortic valve
K. Zerva (Athens, GR)

Cleft posterior mitral valve leaflet concomitant with mitral valve prolapsus: an uncommon cause of mitral regurgitation
O. Tok (Istanbul, TR)

A rare case of primary acquired tricuspid regurgitation
M.P. Carrington (Porto, PT)

Echocardiography of aorta-to-left atrial fistula
K. Nadejda (St-Petersburg, RU)

Recurrent prosthetic thrombosis
B. Alcon Duran (Getafe, ES)

Acute heart failure after 15 years with a bioprosthetic mitral valve
B.S. Botezatu (Bucuresti, RO)

Pitfalls of the simplified Bernoulli equation
A. Gambaro (Scorze', IT)

Emergency echocardiography in the diagnosis of infective endocarditis of a bicuspid aortic valve with ruptured aortic root abscess causing septic shock
H. Soliman (London, GB)

Asymptomatic pulmonary embolism after transvenous lead extraction due to cardiac device related infective endocarditis with large vegetations.
A. Wojtkowska (Lublin, PL)

Aspergillus endocarditis without prior cardiac surgery: a case report
D. Candeias Faria (Amadora, PT)

Subaortic membrane in a patient with hypertrophic obstructive cardiomyopathy
V.M. Parato (San Benedetto Del Tronto, IT)

Fabry disease mimicking acute coronary syndrome - an imaging-based diagnosis
M. Chivulescu (Bucharest, RO)

When all else fails: usefulness of cardiac CT for the diagnosis of arrhythmogenic ventricular displasia
F. Valente (Barcelona, ES)

Cardiac amyloid regression after autologous stem cell transplantation
S.E.D.A. Tan Kurklu (Ankara, TR)

Refractory cardiogenic shock in fulminant giant cell myocarditis
A. Gambaro (Scorze', IT)
Successful management of a pregnant patient with Eisenmenger Syndrome
S. Akturk (Sihhiye-Ankara, TR)

Tuberculous effusive-constrictive pericarditis
E. Lopez-Rodriguez (Monterrey, MX)

Cor triatriatum dexter acted like a prenatal eustachian valve and resulted in an embolic stroke
C.S. Park (Bucheon, KR)

Attention to the details. Right coronary artery-right atrium fistula
K. Englezopoulos (Agios Stephanos, GR)

Iatrogenic intracardiac shunt during extracorporeal membrane oxygenation
N. Unni (London, GB)

Did associated anomalous left-sided right coronary artery origin with inter-arterial course shield our asymptomatic patient with ruptured right sinus of vasaalva aneurysm from sudden death?
I. Ivanac (Zagreb, HR)

Long-term complication in patient with takeuchi repair surgery
E. Cambronero Cortinas (Albacete, ES)

Large aneurysm in previous coarctation repair in the context of severe aortic bioprosthesis dysfunction
E. Cambronero Cortinas (Albacete, ES)

The central role of multimodality imaging in cardio-oncology: a case of adenovirus myocarditis in a leukemia patient
D. Laenens (Lubbeek, BE)

Cardiac magnetic resonance: a weapon in acute coronary syndrome
J. Ferreira (Coimbra, PT)
The imaging examination and quality assessment
Influence of morbid obesity on the structural and functional parameters of left cardiac chambers.
A. Bogdanova, M.Y. Gilarov, A.R. Bogdanov, Z.M. Gioeva, E.V. Konstantinova (Moscow, RU)
P1519

The first step of making echocardiograms noise-free
R. Kakihara, N. Inou, A. Kuramoto, A. Inayoshi (Toyohashi and Tokyo, JP)
P1520

Left ventricular wall thickness, a comparison between transthoracic echocardiography (TTE) and cardiovascular magnetic resonance (CMR). TTE overestimates left ventricular thickness.
V. Chia, T. Hecker, A. King, M. Joseph (Adelaide, AU)
P1521

Appropriate use criteria for echocardiography: a single center experience in hospitalized patients
B. Neves, J. Melo Alves, A. Raimundo, A. Toste, D. Ferreira, N. Cardim (Lisbon, PT)
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Assessment of morphology and function
Association between left atrial appendage morphology and stroke in atrial fibrillation: comparison between quantitative and visual classification
P1523

Echocardiographic measures of left atrial structure and function and the association with atrial fibrillation following acute coronary syndrome
A.R. Madsen, K.S. Skaarup, J.S. Jensen, A.Z. Iversen, T. Biering-Sorensen (Copenhagen, DK; Boston, US)
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T. Mlikovic, M. Bjelobrk, A. Ilic, S. Dodic, T. Plavsic, A. Stojsic-Milosavljevic, M. Kalic (Sremska Kamenica and Novi Sad, RS)
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Comparison of different echocardiographic methods to determine left atrial sphericity controlled by cardiac magnetic resonance (CMR) or computerized tomography (CT) in patients with atrial fibrillation
C. Brenes Umana, F. Alarcon, R. Borras, F. Bisbal, S. Montserrat, A. Doltra, T.M. De Caralt, R.J. Perea, S. Prat, L. Mont (Barcelona, ES)
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Automated two-dimensional echocardiographic algorithm for assessing left ventricular ejection fraction and volumes: comparison with manual three-dimensional echocardiography and magnetic resonance
E. Spitzer, B. Ren, H. Jonker, E. Galli, A. Hernandez, E. Donal (Rennes, FR)
P1527

Different adaptations of global and regional right ventricular shape to pressure and volume overload
P1528

Right ventricular volumes determined by three-dimensional echocardiography predict future pulmonary valve replacement in patients with repaired tetralogy of fallot
B. Pirat, B. Varan, L.E. Sade, H. Muderisigolu (Ankara, TR)
P1529

Comparison between invasive and non-invasive estimation of left ventricular pressure-strain loops
A. Hubert, V. Le Rolle, E. Gaill, A. Hernandez, E. Donal (Rennes, FR)
P1530

Right ventricular function and its coupling to pulmonary circulation in patients with pulmonary hypertension: an echocardiography-catheterization study
C.C. Beladan, L. Predescu, P. Platon, R. Enache, A. Mateescu, A. Calin, M. Rosca, S. Botezatu, C. Ginghina, B.A. Popescu (Bucharest, RO)
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A novel and easy technique to measure intraventricular blood flow dynamics using conventional color Doppler and 2-dimensional echocardiography images
E.K. Kim, C.K. Han, S.W. Park, Y.J. Moon (Seoul, KR)
P1532

Doppler analyser: a new feasible method to measure intraventricular blood flow using conventional echocardiography
E.K. Kim, C.K. Han, S.W. Park, Y.J. Moon (Seoul, KR)
P1533

Left atrial (LA) pressure impacts on the diastolic pressure gradient (DPG) - the role of LA remodelling
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3D rather than 2D echocardiography should be recommended for left ventricular ejection fraction evaluation in patients with myocardial infarction? Comparison with cardiac magnetic resonance
P1535

Can global longitudinal strain replace simpson’s bipline method on echography left ventricular ejection fraction evaluation?
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Association between longitudinal LV systolic function and cardiovascular risk factors in hypertensive patients who have metabolic syndrome. P1537
L. Aldabbagh, M. Dhamin (Kufa, IQ)

Detection of subtle changes in stroke volume during pre-load stress echocardiography by three-dimensional echocardiography using automated adaptive analytics algorithm P1538

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Tissue tricuspid annular displacement - a new speckle tracking tool for functional assessment of the right ventricle P1540
F. Pawliczak, J.D. Kasprzak, P. Lipiec (Lodz, PL)

Preoperative echocardiographic evaluation can predict early right ventricular failure after left ventricular assist device implantation in intermacs 3-4 patients with advance heart failure P1541
M.J. Ruiz-Can, L. Paluszskiewicz, E. Ljajik, M. Schoenbrodt, J. Boergermann, E. Rehn, V. Lauenroth, J. Gummert, M. Morschuis (Bad Oeynhausen, DE)

Pulmonary arterial hypertensive patients: CMR interventricular septal curvature duration predict mortality: a follow up CMR study P1542
C. Ramalhao, L. Geraldes, S. Adigopula, N. Tzemos, J. Grapsa (Abu Dhabi, AE; Cleveland, US)

Right ventricular outflow tract tissue doppler in patients with heart failure P1543
M. Tsererava (Tbilisi, GE)

Relationship of echocardiographic diastolic function with electrocardiographic ventricular repolarization and atrial depolarization parameters on hypertension subjects P1544
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Ischemic heart disease Beta-blockers in non-ST elevation acute coronary syndrome and preserved left ventricular ejection fraction: is there long term benefit? P1546

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G.S. Pushkarev, V.A. Kuznetsov, E.I. Yaroslavskaya, D.V. Krinochkin (Tomsk, RU)

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Heart valves Aortic valve area calculation in aortic stenosis: reclassification of aortic stenosis severity with 3Dimensional transesophageal echocardiography P1551
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Ross procedure in adult population: is it an option? P1552

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Influence of aortic valve calcification on left ventricular mass, diastolic and longitudinal functions in aortic stenosis with preserved ejection fraction P1554

The potential value of MicroRNA distribution in different phenotypes of severe aortic valve stenosis - a preliminary study P1555

Transesophageal two dimensional echo for assessing the aortic annulus diameter before transcatheter aortic valve implantation. P1556
M. Librera, M.D.alto, A.D.andrea, M. Romano, C. Bricuori (Naples, IT)
A real-world three year outcome study in symptomatic patients with isolated severe aortic stenosis and preserved left ventricular ejection fraction
A. Calin, C.C. Beladan, A.D. Mateescu, M. Rosca, R. Enache, M.M. Gurzun, C. Calin, S. Botezatu, C. Ginghina, B.A. Popescu (Bucharest, RO)

Differences in ventricular remodeling in aortic stenosis according to sex
S. Gamaza Chulian, E. Diaz Retamino, R. Carmona Garcia, S. Camacho Freire, D. Ruiz Fernandez, A. Giraldez Valpuesta, E. Otero Chulian (Jerez and Huelva, ES)

Safety and usefulness of stress echocardiography in patients with asymptomatic severe aortic stenosis.

Severe functional tricuspid regurgitation and atrial fibrillation: an emerging syndrome

Echocardiographic characteristics and prognostic impact of severe tricuspid regurgitation.

Right ventricular systolic function in severe tricuspid regurgitation: a role of longitudinal strain analysis
F. Ancona, S. Stella, C. Capogrosso, C. Marini, L. Italia, E. Agricola (Milan, IT)

Ascending aortic dilatation in patients with significant tricuspid regurgitation

Clinical outcomes in isolated functional tricuspid regurgitation according to gender

the effect of the right ventricle lead implantation on tricuspid valve and the implicating factors with 3D-echocardiography
H. Poorzand, S. Hosseini, M. Tayyebi, A. Heidari Beigi (Mashhad, IR)

Is closing the hole safe in patients with very reduced left ventricular function?. Insights from percutaneous mitral valve repair with the Mitraclip device

Transthoracic echocardiography is adequate for intraprocedural assessment with the latest generation self-expandable transcatheter aortic valve replacement
R. Jain, D.P.O. Hair, T.K. Bajwa, A.M. Kirby, D. Ignatowski, B.K. Khandheria (Milwaukee, US)

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Echocardiographic evaluation in patients with granulomatosis with polyangiitis
A. Borowiec, T. Zielonka, T. Rusinowicz, M. Hadzik-Blaszczyk, K. Zycinska (Warsaw, PL)

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Provocation of left ventricular outflow tract obstruction using nitrate inhalation in hypertrophic cardiomyopathy: relation to electromechanical delay
W. Hamed, H.M. Badran, R.I. Yaseen, T. Ashkar (Shebin El-kom, EG)

Anatomical characteristics and effectiveness in transaortic extended left ventricular myectomy for hypertrophic obstructive cardiomyopathy
A. Furugen, H. Doi, M. Hashimoto, K. Mitsube, S. Sumino, R. Koshiba (Sapporo, JP)

The role of transthoracic echocardiography in the follow up of patients submitted to alcohol septal ablation in obstructive hypertrophic cardiomyopathy

Left ventricular strain as a predictor of events in Hypertrophic cardiomyopathy

Prognostic role of global longitudinal strain in transthyretin cardiac amyloidosis
R. Costantino, D. Di Nunzio, M. Campisi, P. Pugliatti, A. Recupero, G. Di Bella (Messina, IT)

Impact of hypertension on left ventricular function in patients with apical hypertrophic cardiomyopathy
S. Miyazaki, S. Kattel, R. Morimoto, M. Maruyama, H. Daida (Tokyo, JP)

Left atrial mechanics through strain analysis can differentiate hypertrophic cardiomyopathy from hypertrophy secondary to arterial hypertension

The development of an apical pouch with exercise stress echocardiography in patients with apical hypertrophic cardiomyopathy: a novel observation
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A. Zaroui, M. Boukhris, S. Zarrouk, R. Mechmeche (Tunis, TN)

Left ventricular relaxation is an independent predictor of the survival in hypertrophic cardiomyopathy  
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Differences in the remodeling patterns distribution in hypertensive African-European and Caucasian patients.  
P1580  
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