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# 'Never whisper in the presence of wrong'

#### Domenico Pagano

EACTS Secretary General

#### Welcome to the '20s!

e hope this new decade proves to be a time of learning, ground-breaking discovery and personal fulfilment for you.

The outbreak of the coronavirus in Wuhan, China is a very serious and potentially global attack on life. Our thoughts go out to the people of the Hubei province and the surrounding regions, and especially to the dedicated expert clinical teams trying to prevent loss of life.

#### The need for groundbreaking science

The coronavirus will ultimately be controlled by research, science and a collaborative multidisciplinary approach which will demonstrate just how vital it is to pool collective talent and energy to develop new ways to protect the global population.

Our own field of cardiothoracic surgery is a great example of how cutting-edge science and new discoveries have helped us to improve patient outcomes and save lives – lives that just a few decades ago would have been lost. At EACTS we recognise the vital role that industry plays and its investment in clinical trials to help develop the surgical techniques of the future.

## Transparency and evidence we can trust

What is important is that the evidence which comes out of clinical trials can be relied upon. As Eduard Quintana has reminded us recently, our past President Ruggero De Paulis highlighted that we must practice in a 'house of glass' when he gave his presidential address at the 33rd EACTS Annual Meeting in Lisbon last year. We – and others



- must continue to become more transparent and more open on these matters. That is why we are keeping you and external partners updated on issues and challenges that our organisation faces. In December 2019, as new information emerged about the validity of the EXCEL trial, the EACTS Council unanimously withdrew its support for the current recommendations on the treatment of left main disease in the 2018 joint ESC-EACTS Myocardial Revascularization Guidelines. This decision was based on a range of scientific, statistical and professional issues that had been raised.

We have provided information to members about this and you can see more details about our rationale for the decision in the News section of our website (www.eacts.org/ news-posts).

#### **BBC** investigation

We have made several attempts to help resolve the concerns about the Guidelines. On 18 February 2020 the BBC revealed further concerns which corroborate our decision to withdraw support for the recommendations on left main disease. The BBC Newsnight programme can be seen at: www.youtube.com/ watch?v=lxWwyVCcrEs

The issues uncovered by the latest BBC programme have wider ramifications, both for other clinical trials and for the clinical guideline process. Heart teams rely on the clinical guidelines that are developed to inform the best treatment options for patients.

## A new approach to guideline development

During 2020 we will continue to make the case for the highest standards in this area. As American cardiologist Bernard Lown said in 1993: "Never whisper in the presence of wrong." We must be confident that the guidelines that are produced are based on evidence we can trust so that we can provide advice on the most appropriate treatment options for our patients. The methodology for developing "Guidelines we can trust" is well described by the Institute of Medicine (IOM), and we fully endorse this approach:

 Minimising bias by using systematic literature searches

#### **Annual Meeting**

## 'Never whisper in the presence of wrong'

Continued from page 1

- around predefined clinical questions
- Transparent management of conflicts of interest
- The use of statistical methodologists to prepare evidence tables and guide the interpretation of data

 The use of the GRADE collaboration system
EACTS is compliant with the
IOM standards and we are
taking steps to adopt the
GRADE system. We will publish
an updated guidelines manual in
due course.

#### **Educational opportunities**

The ability to assess the accuracy of data that are presented to us is an important skillset, but just one of many that we will champion in our varied educational programme this year. Our high-quality education and training programmes keep you up to date with the latest innovation and research.

We have a wide range of courses on offer through our Academy to support you at different stages of your career. It's an impressive list and I encourage you to have a look at "We must be confident that the guidelines that are produced are based on evidence we can trust so that we can provide advice on the most appropriate treatment options for our patients."

**Domenico Pagano** 

what is on offer: www.eacts.org/ educational-events/programme

For free online resources, visit our Multimedia Manual of Cardio-Thoracic Surgery (mmcts.org), where we provide a video manual of cardiovascular and thoracic surgery tutorials. EACTS also supports trainees via scholarships to the Academy courses and offers members high-quality training opportunities to fast-track your career and promote lifelong learning via the Francis Fontan Fund Fellowships. This initiative, now in its second year, will improve skills and provide you with an internationally recognised mark of achievement.

## 34th EACTS Annual Meeting, Barcelona

This year the 34th EACTS Annual Meeting will take place 8–10 October in Barcelona. Planning is already underway for this prestigious event, the largest cardiothoracic meeting in the world, and we will start to release programme information in the coming weeks. Abstract submissions are now open; please do get your submissions in by the deadline of 30 April.

We look forward to seeing you there!

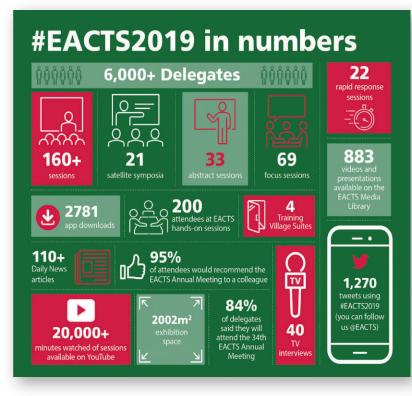
#### Inspiring more women to achieve their surgical career ambitions

EACTS supports equality

and diversity and we can be proud that the surgical community and our Association are filled with great talent from diverse communities. However, we recognise that we need to promote and foster an environment in which women feel encouraged to pursue a career in cardiothoracic surgery. We need to tap into women's expertise and encourage more women to pursue a rewarding career in cardiothoracic surgery.

Let's be honest: the number of women surgeons in our settings is currently not good enough. There is a significant gender gap. That's why we have decided to address this, and we are delighted that Professor Jolanda Kluin is going to lead our new Women in Cardiothoracic Surgery Committee. I urge you all to support her and the committee as we change mindsets and perceptions, ensuring that women surgeons can achieve their surgical career ambitions in cardiothoracic surgery.

Wishing you a very rewarding year and decade ahead.





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TERUMO



## Snapshots from the 33rd Annual Meeting in Lisbon



## Equipping surgeons with endovascular skills

he EACTS Endovascular Skills Course offers surgeons the chance to learn in-depth endovascular skills via expertdriven presentations, simulator training and guidance. Spanning three parts – each lasting two days – the first two courses will be held in Windsor, UK in May and July, followed by Part 3, being held in December in Geneva, Switzerland.

Previous courses have been met with very positive response, noted Konstantinos Tsagakis, a cardiac surgeon at University Hospital, Essen, Germany, and Co-Director of the Course alongside Davide Pacini (Department of Cardiac Surgery, S. Orsola-Malpighi Hospital, University of Bologna-Alma Mater Studiorum, Bologna, Italy).

Speaking to EACTS News, Dr Tsagakis noted that the upcoming Endovascular Skills Course has been further streamlined to reduce maximum attendance from 50 to 20, thereby offering all who participate with a closer-knit environment to allow more indepth practical training. "These courses are comprehensive - in the first surgeons learn about the endovascular techniques, the second will demonstrate how to perform some of them and in the third they will perform the techniques themselves on

cadavers and animals," he said.

The course is in response to the growing demand from surgeons to learn endovascular skills. A survey conducted at 2018's Annual Meeting in Milan found that 89% of respondents wanted the opportunity to learn endovascular techniques.

"We want surgeons to be able to perform endovascular techniques in addition to open surgery."

Konstantinos Tsagakis

"Endovascular procedures are very attractive and safe these days," said Dr Tsagakis. "They are also very popular with patients because they are less traumatic, and obviously preferred over open surgery.

"We want surgeons to be able to perform endovascular techniques in addition to open surgery. That way, they can continue to treat patients as they do now but also harness the skills and knowledge required to perform endovascular procedures if the patient is a suitable candidate."

As Dr Tsagakis described, complex endovascular procedures can be performed by many different specialities including cardiac surgeons, vascular surgeons, radiologists, cardiologists and beyond. The techniques have been around for years, but the trouble lies in making sure surgeons assimilate the techniques into their practice. He predicted that, in 10 years,

all cardiac surgeons will need endovascular skills, not least in the aortic-valve and mitral valve arenas where a great influx of transcatheter procedures has already taken place. "Cardiac surgeons have to expand their interest and knowledge base," said Dr Tsagakis. "To be honest, I think we are late on this and should have done this at least eight years ago - probably earlier. We have to deal with thoracic and aortic problems and endovascular treatments are a substantial part of that.

"There are very few surgeons doing this at the moment and it is not the main focus of education for young cardiac surgeons either. That is why we believe the EACTS Endovascular Skills Course will be useful."

Dr Tsagakis, who has been using endovascular techniques in his clinical practice since 2004, said if cardiac surgeons didn't learn about endovascular procedures they could run the risk of losing patients to



Konstantinos Tsagakis

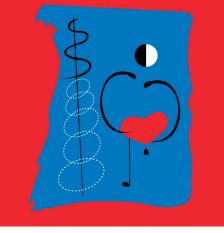
other specialities. However, he stressed that open surgery should not be neglected. "Endovascular procedures will not be able to replace open surgery; we will carry on performing surgery as we do it today and I'm sure it will still exist in the future.

"Open surgery produces very good results, but in many cases endovascular techniques offer better results, for example for stent grafts and treatment of the descending aorta. Nowadays, there is also a trend to extend endovascular treatments to aortic arch patients and in the future the ascending aorta may also be treated in this way."

More details of the Endovascular Skills Course can be found on the EACTS website: www.eacts.org.

## **34<sup>th</sup> EACTS Annual Meeting** Barcelona, Spain 8-10 October 2020





Raising Standards through Education and Training

## Minimally Invasive Techniques in Adult Cardiac Surgery (MITACS)

#### **Michael A Borger**

University Department for Cardiac Surgery, Leipzig Heart Center, Germany

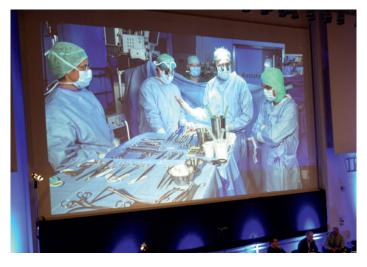
Please come and join us June 18–19 for the EACTS Minimally Invasive Techniques in Adult Cardiac Surgery (MITACS) meeting in Leipzig, Germany. I have the great privilege of joining Peyman Sardari Nia, Thomas Walther, and Volkmar Falk as a MITACS Course Director. Together we'll give our best efforts to make next year's meeting a memorable one.

As in years gone by, the course will be structured primarily as an educational event with several live operations interspersed with didactic practical lectures and livein-a-box videos. The course will be of value to cardiac surgeons, cardiologists, cardiac anaesthetists, fellows, residents, perfusionists and nurses who are interested in minimal invasive cardiac surgery. Live surgical procedures will be broadcast from the operating room and hybrid suites within the Leipzig Heart Center, with plenty of opportunity for interaction and



discussion between expert faculty and course attendees. We will continue to focus on contemporary approaches to minimal invasive aortic valve, mitral valve, tricuspid valve, aortic, and atrial ablation surgery, as well as showing detailed tips and tricks necessary to perform minimally invasive cardiac surgery (MICS) coronary artery bypass grafting (CABG).

This year's MITACS meeting promises to be another excellent educational opportunity for clinicians interested in establishing or mastering minimal invasive techniques at their institution. We look forward to seeing you in Leipzig!







#### #EACTS2020 - what's in store?

We're looking forward to seeing you all in Barcelona, Spain from 8-10 October 2020 for the 34th EACTS Annual Meeting.

It will be another year of discovering new techniques, sharing best practice, hands-on training sessions, lively presentations and debates and evaluating results, guidelines and all of the latest thinking on cardiothoracic surgery.

#### Join us in Barcelona for:

 Hands-on training and development opportunities that meet your annual CPD requirements in one go  Trial updates to keep you on the pulse with the latest research

 Ground-breaking research to provide insight into the innovations that will influence cardio-thoracic surgery in the future

 An exhibition featuring leading innovators and experts, showcasing the latest technology in cardio-thoracic surgery.

Hear from some of our delegates at Lisbon on why the EACTS Annual Meeting is so important.

## Submitting an abstract for presentation at the 34th EACTS Annual Meeting

We encourage you to submit an abstract to be considered for presentation in Barcelona. Each abstract submitted to the Association for possible presentation must summarise an original contribution and must not have been submitted, presented, published or accepted for presentation

#### **Registration and membership**

Registration will open in the Spring. EACTS Members benefit from reduced ticket rates for the EACTS Annual Meeting, so if you're not currently a member please sign-up here: www.eacts.ora/the-association/membership or publication elsewhere. Abstracts must be received by 30 April 2020. For more information, please visit: www.eacts.org/ annual-meeting/abstract-submission/#ITA



## Cell and secretome-based therapies: translating science into clinical practice

H Jan Ankersmit and Massimiliano Gnecchi on behalf of the course organisers

he 6th Regenerative Medicine EACTS Academy Course, entitled *Cell and secretome-based therapies: translating science into clinical practice*, will take place 23–24 April at Almo Collegio Borromeo, Pavia, Italy. EACTS takes pride in continuing the educational effort in this avant-garde field that was initiated by Professor Schmid in Berne, 2008.

The use of advanced therapy medicinal products (ATMPs, e.g. stem cells) has reached clinical reality, having passed Phase III clinical trials in the graft versus host disease (GVHD) nosology. Stem cell therapy after acute myocardial infarction (AMI) in humans is, however, judged to be futile after performing an individual patient data evaluation (Gyöngyösi et al. 2015).

In 2005, Gnecchi et al. conclusively demonstrated that concentrated cultured medium derived from mesenchymal stem cells (MSCs) was able to reverse ischaemia reperfusion injury in a preclinical AMI model. Hence, it was shown for the first time that the secretome derived from MSC, and not the cellular compartment, causes regenerative effects *in vivo*. In the period from 2005 to 2019, the 'cell-centric vision' was silently exchanged to the 'secretome reality' in regenerative medicine (Menasché, 2015).

Between 2009 and 2015, thoracic surgeons in Vienna expanded the field. Lichtenauer et al. (2011) and Wagner et al. (2018) showed for the first time that stressed peripheral white blood cells (PBMCs) secrete proteins, lipids and exosomes that can be utilised in regenerative medicine. In mode of action (MOA) studies, it was shown that the 'stressed PBMC secretome' causes vasodilation, inhibition of platelet aggregation and cytoprotection *in vitro*. These biological activities translated to the attenuation of hypoxia-induced cell death in clinically





Massimiliano Gnecchi

H Jan Ankersmit

relevant small and large animal models of MI, myocarditis, stroke, spinal injury and wound healing (Beer et al., 2016). Most recently, Simader et al. (2019) found that the induction of necroptosis of PBMCs is the sine qua non in the generation of this potent 'regenerative cocktail'.

Most cardiac and thoracic surgeons judge research purely by outcome and by applicability to their entrusted patients. Preclinical work is important, but examples of true translation from bench to bedside are scarce. Innovations are predominantly initiated by the medical device industry.

This academic reality is, in part, due to the fact that 'regulatory science' in drug development is not taught to academic surgeons. Regulatory science pertains to topics such as intellectual property rights (Vecht et al., 2009), good manufacturing practice, reproducibility of data, quality management, batch-to-batch comparability, stability programmes, good laboratory practice, toxicological studies, scientific advice and individual qualification levels, amongst others.

The Cell and secretome-based therapies: translating science into clinical practice symposium aims to augment this knowledge in the realm of cardiothoracic surgery. Symposium attendees will acquire a firm knowledge about basic science, regulatory science and proof-of-concept studies in regenerative medicine.

The faculty of this meeting is exemplary. Philippe Menasché (*Lancet* 2001, 2003, 2005), the frontrunner of cellular therapy in AMI in Europe, Kai C Wollert (*Lancet*, 2004), Antonio Salgado (*Cells*, 2019), Massimiliano Gnecchi (*Nature Medicine*, 2005) and many more will present their latest insights in the field. Furthermore, Ghazaleh Gouya from Vienna will present data for the first time relating to a clinical trial in which the allogeneic secretome is utilised in regenerative medicine in Europe.

EACTS cordially invites and welcomes all scholars to Pavia April 23–24. For more details, head to: www.eacts.org/educational-events/programme

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## EACTS News

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## EACTS aortic valve repair educational activities for 2020

**Ruggero De Paulis** European Hospital, Rome, Italy; on behalf of the Task force for Aortic Valve Repair

n the context of an aortic root aneurysm, the aortic valve becomes incompetent due to the tethering forces that prevent the cusp being properly coapted in the centre of the root. When the aortic annulus follows the root dilatation, this process is even more evident. The valve is intrinsically normal and the valve regurgitation depends solely on the root dilatation. The concept of avoiding the replacement of a normal aortic valve in this specific anatomical situation was introduced in the late 1980s and early '90s by Magdi Yacoub and Tirone David.

For more than 20 years, these operations – generally referred to as 'valve-sparing techniques' - remained in the hands of few surgeons, and their diffusion was rather slow. At the turn of the century, their adoption started to progressively increase as reflected by the intensification in the number of scientific publications on the subject. These two types of valve-sparing procedures, better known as 'remodelling' and 'reimplantation' techniques, are now increasingly performed around the world. Both techniques have evolved over time and their use has been widely recognised and introduced as a Class IC indication in the European guidelines for valve diseases.

The increased knowledge acquired on the anatomy and physiology of the aortic root and aortic valve leaflets has also made it clear that if we want to achieve perfect results, we need to learn how to deal with the leaflets. That is, in order to correct intrinsic anomalies that can be preexisting or induced by root reconstruction.

This aspect has fuelled the desire for repairing the

majority of regurgitant aortic valves, with or without the presence of a dilated aortic root. Nowadays, it is theoretically possible to repair the majority of purely regurgitant aortic valves, irrespective of whether they are tricuspid or bicuspid. However, the rate of adoption of these novel approaches is rather slow and there is a substantial need for increased and effective education on the subject.

The possibility of repairing the aortic valve and avoiding the use of any kind of prosthetic valve replacement has an enormous impact on the quality of life for most patients, but it is certainly of the utmost importance for the younger patient population. The culture of repairing the aortic valve needs to be disseminated, especially in an era when the technology makes it possible to replace the heart valve in a simple and less invasive way.

In this context, the EACTS Academy is proud to offer a wide portfolio of educational activities that are aimed at diffusing the culture of aortic valve repair, while teaching from the basic surgical starting point of aorticvalve sparing and repair, all the way to the more advanced techniques that are needed to deal with the most complex anatomical presentations.

A general introductory course called 'Introduction

to aortic surgery' – devoted to resident and board-certified surgeons in the first years of clinical activity – has been featured in the EACTS Calendar for for several years, and it will again be offered in March. This is a Level 2 course where experts on the subject explain the basic principles of valve sparing and repair by means of presentations and video sessions.

However, for those who want to delve further into the subject, there are two additional levels of educational activities that are available to help in improving overall knowledge, as well as individual skills. The Level 3 Aortic Valve Repair Summit will take place June 8-9 in Rome, Italy. The Summit aims to present state-of-the-art developments in this particular field, with an educational programme delivered by a specific task force of experts, as appointed by the Association. The programme will focus on echocardiography and imaging techniques that are necessary to plan the optimal strategy for each individual patient.

With the help of live surgery, the basic steps of aorticvalve sparing and repair will be reviewed for the tricuspid and bicuspid valve, both in the presence and absence of a dilated root. The differences and similarities between the most common approaches, remodelling and reimplantation will be discussed in light of different clinical and anatomical presentation. Other

> novel alternatives to these standard procedures will also be discussed. At the end of the meeting, all in attendance should be able to understand how the same aortic pathology can be treated (equally as well) by using different

techniques - each of which will be outlined by renowned experts in the field who have significantly contributed to their development. In addition to this practical- and surgical-oriented approach, the meeting will be enriched by the presentation of the most recent classifications for the bicuspid valve, both from a purely anatomical point of view and from a surgical-oriented approach. Abstracts received by EACTS will be reviewed, and the Organising Committee will then give an award for the best presentation.

If you already have experience in this field, and need to improve your skills in a specific procedure, EACTS provides Level 4 courses that are delivered directly from cardiac centres by a clinician with widespread experience in that specific technique. Live surgery, meanwhile, usually addresses more complex cases and specific anatomical conditions. The attendance at such meetings is usually limited to 20-30 delegates in order to increase the interactivity with the faculty, to allow better discussion of the detail of each individual live surgery, and to facilitate opinion sharing and experience.

This year, if you want to broaden your experience with the remodelling technique, there are courses in Paris, France ('Annuloplasty for Aortic Valve Repair: A practical approach', 9–11 March) and Homburg, Germany ('Reconstruction of the Aortic Valve and Root: A practical approach', 16–18 September), but if you are interested in the reimplantation technique, a specific course will be held in Brussels, Belgium, towards the end of the year.

This complete portfolio of academic and educational activities will allow you to fill any gaps in knowledge that you may have in this field by choosing the most appropriate course depending on your past experience, your personal choices and your future needs.

Indications for surgery in (A) severe aortic regurgitation and (B) aortic root disease (irrespective of the severity of aortic regurgitation)

Indications for surgery	Class <sup>a</sup>	Level <sup>b</sup>
A. Severe aortic regurgitation		
Surgery is indicated in symptomatic patients [57, 58, 66, 67].	I	В
Surgery is indicated in asymptomatic patients with resting LVEF <50% [57, 58].	I	В
Surgery is indicated in patients undergoing CABG or sur- gery of the ascending aorta or of another valve.	I	c
Heart Team discussion is recommended in selected patients <sup>c</sup> in whom aortic valve repair may be a feasible alternative to valve replacement.	ļ	c
Surgery should be considered in asymptomatic patients with resting ejection fraction >50% with severe LV dilata- tion: LVEDD >70 mm or LVESD >50 mm (or LVESD >25 mm/m <sup>2</sup> BSA in patients with small body size) [58, 66].	lla	В
B. Aortic root or tubular ascending aortic aneurysm <sup>d</sup> (i severity of aortic regurgitation)	rrespective	of the
Aortic valve repair, using the reimplantation or remodel- ling with aortic annuloplasty technique, is recommended in young patients with aortic root dilation and tricuspid aortic valves, when performed by experienced surgeons.	ļ	с
Surgery is indicated in patients with Marfan syndrome who have aortic root disease with a maximal ascending aortic diameter 250 mm.	ļ	c
Surgery should be considered in patients who have aortic root disease with maximal ascending aortic diameter: ≥ 45 mm in the presence of Marfan syndrome and additional risk factors <sup>e</sup> or patients with a TGFBR1 or TGFBR2 mutation (including Loeys-Dietz syndrome). <sup>f</sup> ≥ 50 mm in the presence of a bicuspid valve with additional risk factors <sup>e</sup> or coarctation. ≥ 55 mm for all other patients.	lla	с
When surgery is primarily indicated for the aortic valve, replacement of the aortic root or tubular ascending aorta should be considered when ≥45 mm, particularly in the presence of a bicuspid valve. <sup>g</sup>	lla	с

BSA: body surface area; CABG: coronary artery bypass grafting; CT: computed tomography; ECG: electrocardiogram; LV: left ventricular; LVEDD: left ventricular end-diastolic diameter; LVEF: left ventricular ejection fraction; LVESD: left ventricular end-systolic diameter. <sup>a</sup>Class of recommendation.

<sup>b</sup>Level of evidence.

"Level of evidence.

<sup>c</sup>Patients with pliable non-calcified tricuspid or bicuspid valves who have a type I (enlargement of the aortic root with normal cusp motion) or type II (cusp prolapse) mechanism of aortic regurgitation [6, 48, 49]. <sup>d</sup>For clinical decision making, dimensions of the aorta should be confirmed by ECG-gated CT measurement.

<sup>e</sup>Family history of aortic dissection (or personal history of spontaneous vascular dissection), severe aortic regurgitation or mitral regurgitation, desire for pregnancy, systemic hypertension and/or aortic size increase >3 mm/year (on repeated measurements using the same ECG-gated imaging technique measured at the same level of the aorta with sideby-side comparison and confirmed by another technique).

<sup>f</sup>A lower threshold of 40 mm may be considered in women with low BSA, in patients with a *TGFBR2* mutation or in patients with severe extra-aortic features [60].

<sup>g</sup>Considering age, BSA, aetiology of the valvular disease, presence of a bicuspid aortic valve and intraoperative shape and thickness of the ascending aorta.

Figure 1. From the 2017 ESC/EACTS Guidelines for the management of valvular heart disease.<sup>1</sup>

# Annuloplasty for aortic valve repair: A practical approach

## An EACTS technical course on aortic valve repair; March 9-11: Paris, France

#### **Emmanuel Lansac**

Course Director: Institut Mutualiste Montsouris, Paris, France

ecent ESC/EACTS guidelines for heart valve diseases recommend a heart-team discussion to evaluate aortic valve reparability and "aortic valve repair using the re-implantation or remodelling with aortic annuloplasty technique, in young patients with aortic root dilation and tricuspid aortic valves" (Figure 1).1 However, despite an increased level of evidence that aortic valve repair - when compared to the use of a prosthesis - leads to fewer valverelated complications, as well as a better quality of life, it is still rarely performed. This fact brings into question the lack of technical standardisation of valve-sparing/ repair procedures aimed at improving reproducibility and reducing the risk of reoperation. The Level 3 EACTS technical course on aortic valve repair offers, for a limited number of attendees, an in-depth 2.5-day training course on standardised approaches to aortic valve repair with external aortic ring annuloplasty.

Good candidates for aortic valve repair are patients with pliable, non-calcified tricuspid or bicuspid valves who have type I (enlargement of the aortic root with normal cusp motion) or type II (cusp prolapse) mechanisms of aortic insufficiency. Depending on whether the sinuses of Valsalva and/or the tubular ascending aorta are dilated, three phenotypes can be individualised:

1) Dilated root aneurysms (sinuses of Valsalva 45 mm); 2) dilated tubular ascending aortic aneurysms (sinuses of Valsalva 40–45 mm); 3) isolated aortic insufficiency (all diameters < 40–45 mm).



According to each phenotype, a standardised approach to valve repair was developed, based on: 1) Dynamic preservation or reconstruction of the aortic root; 2) cusp geometry and effective height assessment of the valve; and 3) an external aortic ring annuloplasty to increase the surface of coaptation and protect the repair (Figure 2).<sup>2</sup>

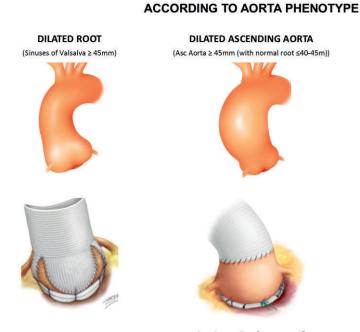
The objective of this Level 3 EACTS technical course is to offer a standardised approach for aortic valve repair with external aortic ring annuloplasty, providing a stepby-step process including patient selection, echo valve analysis and technical standardisation for a reproducible repair, according to each phenotype of the aorta. As this course reflects the multidisciplinary aspect of aortic valve repair, course delegates could include cardiac surgeons and echocardiographers (cardiologists and anaesthetists) who are willing to start, or are already part of, a valve-sparing aortic root replacement and aortic valve repair programme. Advanced residents interested in the field of valve repair are also welcome.

The course will provide indepth training of aortic valve repair from valve-sparing root replacement to isolated aortic valve repair for tricuspid, bicuspid and unicuspid valves. The aim is to integrate state-of-the-art into daily practice, as well as to challenge current knowledge via lectures from international faculty. Presentations will address anatomical issues, the indications and limitations of guidelines, the selection of patients as well as detailed surgical techniques in aortic valve repair and their current outcomes.

The course will also feature live surgeries, offering a fascinating overview of the whole procedure which will be combined with a short video session illustrating specific lesions related to the type of case. Technical issues will be addressed in detailed step-by-step fashion, including standardised management of the valve with assessment of cusp geometry and effective height, as well aortic annuloplasty techniques to protect the repair. Specific facets of aortic dissections as well as the paediatric population will be addressed. In addition, the surgical strategy of valve replacement for non-elderly patients will be addressed including the Ross procedure and Ozaki type procedure with decellularised patches.

The programme will also

#### Figure 2



**Remodeling & Annuloplasty** 

include a 'failure session', in which attendees will discuss cases all the way from echo analysis to surgical repair, learning how to identify predictors of repair failure as well as the bailout techniques available to them when such situations arise. The course will end with a wet lab which will bring together the theoretical knowledge with a practical application on anatomical heart in the historical laboratory of



**AORTIC VALVE REPAIR** 

Asc Aorta Replacement & Annuloplasty

anatomy, Institut du Fer à Moulin in Paris. 

The Level 3 EACTS Aortic valve repair technical course, 'Annuloplasty for aortic valve repair: A practical approach' will take place 9-11 March in Paris, France. For registration (attendee numbers limited), the programme and other details, head to the course website at: www.eacts.org/ educational-events/programme/ annuloplastyavr-2.



ISOLATED AORTIC INSUFFICIENCY

(All aorta ≤ 40-45mm)

Double Sub + Supra-Valvular Annuloplasty

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## **The EACTS Thoracic Domain** Looking ahead to 2020

Eric Rössner University Hospital Mannheim, Germany; on behalf of the Thoracic Domain Chairs

#### During 2020, the EACTS Thoracic Domain looks forward to featuring the following courses:

- Thoracic courses: A series of courses from junior to intermediate to senior, designed for trainees/consultants preparing for their national exam, or especially for the European exam. The courses will stick closely to the curriculum and will provide an efficient and effective way in which to prepare - all for a very reasonable price, and in great locations.
- The all-new Research Support Course: This offers a full educational programme where we help trainees and young consultants to get their research ideas into a study protocol, including a course on how to develop such protocols, and the opportunity to present it at the next Annual Meeting.

Head to www.eacts.org to keep abreast of the upcoming 2020 Thoracic Domain calendar.



## STS/EACTS/Latin America Cardiac Surgery Conference 2019



## Rising attendance, and a very successful meeting

**José L Pomar** Hospital Clinic & University of Barcelona, Spain; on behalf of the Conference Directors

he third edition of this educational programme took place 22–24 November, 2019, under the direction of leading members of the Society of Thoracic Surgeons (STS) and EACTS, and prestigious surgeons from Latin America.

The two-and-a-half-day conference was held at the International Convention Centre in Cancun, Mexico – a very large venue fit to gather the more than 300 in attendance from Central and South America, as well as many other countries all over the world. About one fifth of the attendees were able to get a scholarship of close to \$1,000 provided through the Thoracic Surgery Foundation thanks to the generous donations of Edwards and GoreTex. A special fee was also offered for young surgeons coming from Latin America.

The main hall was used for plenary sessions on mitral and aortic valve disease treatment, discussion on the latest trends in the pathology of the aorta and to emphasise the importance of getting high-quality data to build better databases on the epidemiology and outcomes of the surgical procedures. Sessions with experts presenting complex and unusual cases for open discussion were well attended, as was a very successful session focused on reviewing the latest breaking trials in the cardiovascular field. Lunch symposia offered by industry were also very well attended.

When no plenary sessions were taking place, the conference was divided into three separate and parallel lecture rooms: one devoted to adult cardiac surgery, another to heart failure and its treatment (including transplantation and circulatory assistance), and a final room to congenital heart diseases and their treatment.

Abstracts were selected and allocated to the different sessions, and the award for the best abstract presentation, which includes free registration for the next Latin America Cardiac Surgery Conference, was obtained by a surgeon from Bogotá, Colombia. Posters also proved very interesting and, this time, an award was given to a Belgian author (currently residing in the US) of two posters that explored the attendance level of women at meetings within our specialty.

For the first time, we also incorporated





wet labs to serve as workshops on mitral and tricuspid valve repair, aortic valve replacement and the Ross procedure.

Pigs supported on platforms were used to guide attendees in performing mitral or tricuspid ring annuloplasties, and to learn how to implant artificial chords in the papillary muscles and the leaflets. Implantation of a mechanical prosthesis in the aortic position, dissection of the pulmonary valve and trunk for the Ross operation, or the implantation of a graft in the aortic position were also part of the hands-on sessions.

The three differentiated labs were, for three hours each, an exceptional forum where attendees not only received help from some of the world's leading experts, but where they also had, with the aid of adequate surgical instruments, the possibility of performing learned techniques and discussing appropriate tips and tricks with the tutors.

Finally, social events - including a reception in a typical Hacienda - allowed for outstanding networking among all participants, opening up a unique chance to discuss details not completely understood during the oral sessions.

In summary, this third STS/EACTS/ Latin America Cardiac Surgery Conference proved that efforts by such an outstanding faculty and organisation are worth pursuing in order to achieve a continuous education in cardiac surgery in this wonderful part of the world. Furthermore, the Conference

2020

fostered networking between top specialists from the US, Latin America and Europe in order to expand the exchange of knowledge and surgical skills between senior and younger colleagues.

In addition, it served as a confidence boost for industry in supporting this exceptional conference for the coming years, and supported ways in which to obtain adequate resources for better data acquisition and analysis.

Directors of the Conference, this year led by EACTS, were: José L Pomar (Barcelona, Spain): Patrick Perier (Bad Neustadt, Germany); Lorenzo Galletti (Rome, Italy); Joseph Bavaria (Philadelphia, USA); Vinod Thourani (Atlanta, USA); Juan Pablo Umaña (Bogotá, Colombia) and Nestor Sandoval (Bogotá, Colombia).

The support and permanent help of the Mexican Society of Cardiac Surgery through the past President, Alejandro Rey, the current President, Jose Antonio Heredia, and the Editor of their Journal Ovidio García, along with many of its members, has set an example of collaboration that we hope to achieve in future conferences.

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The next STS/EACTS/Latin America Cardiac Surgery Conference will take place November 19-21, in Santiago, Chile. Head to www.cardiovascularsurgeryconference.org/ to learn more.



Academ

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Endovascular Skills Programme: Course III

9-11 March, Paris, France 12-14 March, Windsor, UK 26-28 March, Windsor, UK 23-24 April, Pavia, Italy May, Windsor, UK 18-19 May, Maastricht, The Netherlands 1-5 June, Windsor, UK 8-9 June Rome Italy 17-19 June, Leipzig, Germany 3-4 July, Windsor, UK 26-30 October, Windsor, UK 19-21 November, Bad Oeynhausen, Germany November, Windsor, UK 7-8 December, Maastricht, The Netherlands Winter, to be announced

To register for these courses visit

www.eacts.org

## A great year for the Congenital Domain

**Lorenzo Galletti** Bambino Gesù Paediatric Hospital, Rome, Italy; Chair, Congenital Heart Disease Domain

s well as the Congenital programme at the 33rd EACTS Annual Meeting in Lisbon, the Academy activities for the Congenital Domain during the second half of 2019 included two other important events. The first, a Level 3 skill course dedicated to transposition of great arteries (TGA) was held in Paris at the Marie Lannelongue Hospital, directed by Dr E Belli and myself. The faculty included surgeons from Europe (Drs Salih, Hazekamp, Zoghby and Lacour-Gayet), USA (Drs del Nido, Bacha, Tweddel, Dearani and Karl), Canada (Dr Barron), China (Dr Li) as well as local cardiologists, anaesthesiologists and intensivists.

The course was focused mainly on the technical aspects and treatment outcomes for simple and complex forms of TGA, including congenitally corrected transposition. Technical demonstrations and live-in-a-box surgeries included live transmission of cases from the operating room. Forty-seven attendees from 11 different countries participated in the course, raising important discussions – especially during live transmissions. Slide presentations from the course are currently available in the



#### EACTS Media Library.

In November 2019, EACTS House in Windsor, UK hosted the Level 2 course on management of congenital heart disease. The aim of the course was to teach the fundamental aspects of the sub-specialty, directed mainly at residents and junior fellows in congenital heart surgery. Fifteen attendees from 12 different countries participated in the course.

The programme included 16 different modules, covering the majority of topics in paediatric and congenital heart disease, including treatment of heart failure by mechanical assist devices and heart transplantation. As is tradition, each module included keynote lectures, clinical case presentations and live-in-a-box surgeries but, as a novelty, this year's faculty included two paediatric cardiologists, Dr Simona Marcora from Bergamo, Italy and Dr Roberta lacobelli from Rome. Their contribution was particularly important, relaying clinical cases and presentations on imaging that were wellappreciated by the students (who actually asked that the multidisciplinary format be maintained and even enhanced in the future).

Looking ahead to this year, the preliminary programme of the Congenital Domain includes a Level 3 skill course – dedicated to the management of single-ventricle lesions – which will take place in Barcelona, Spain, immediately after the 34th EACTS Annual Meeting. The traditional Level 2 course in Windsor will be held in November, where we again plan to increase the number of multidisciplinary sessions and, finally, we are looking into the possibility of adding a course dedicated to mechanical circulatory support in children, likely to be held in September.





#### INTERACTIVE CARDIOVASCULAR AND THORACIC SURGERY



Official Journal of the European Association for Cardio-Thoracic Surgery and the European Board of Cardiovascular Perfusion

#### OXFORE

#### Call for Applications Editor search for the Interactive CardioVascular and Thoracic Surgery

The European Association for Cardio-Thoracic Surgery (EACTS), the premier cardiovascular and thoracic surgery society, is currently accepting expressions of interest from qualified applicants for the Editor-in-Chief position of its journal the *Interactive CardioVascular and Thoracic Surgery (ICVTS)*. The journal has greatly expanded its influence under the leadership of Professor Friedhelm Beyersdorf, Professor Matthias Siepe and their team, and has a 2018 impact factor of 1.931.

The ICVTS Editor-in-Chief will report directly to the Editor-in-Chief of the *European Journal of Cardio-Thoracic Surgery (EJCTS).* 

#### **Responsibilities:**

- Executes Editorial policies as set by EJCTS and EACTS Council
- Appoints effective ICVTS Editorial Board in conjunction with the Editor-in-Chief of EJCTS
- Interfaces with authors and solicits high-quality manuscripts
- Makes ICVTS manuscript status decisions in a timely manner
- Maintains strong relationships with the cardiovascular and thoracic surgery communities worldwide
- Leads strategic initiatives
- Oversees innovation, especially digital innovation
- Available to travel; attends global conferences/meetings
- Chairs ICVTS Editorial Board meetings
- Attends EJCTS and (on demand) MMCTS Editorial Board meetings
- Works effectively with the Publisher (*Oxford University Press*)
- Is spokesperson for the Journal
- Holds regular phone meetings with other Editors and with Executive/Managing Editor
- Reports to the Editor-in-Chief of *EJCTS*

#### Qualifications:

- Significant editorial or journal management experience
- Strong reputation in the field; upholds high ethical standards
- Have a high level of expertise in vascular surgery and extracorporeal circulation/mechanical circulatory support, and experience as a team leader in a surgical clinic
- Clear vision of the specialty, as well as developments in journal publishing
- Builds good rapport with peers and staff
- Published, peer-reviewed journal author
- Academic appointment and active cardiovascular or thoracic surgeon for the appointed time interval
- Able to complete a five-year term beginning in October 2020 (term is renewable for five years pending satisfactory completion of first five years)
- Mandatory: EACTS member in good standing

Please submit expressions of interest (Curriculum Vitae and Letter of Motivation) to Professor Domenico Pagano, EACTS Secretary General (executive.assistant@eacts.co.uk), by 16 March 2020. Interviews will be held during April 2020.

#### Association

## Francis Fontan Fund: Attracting high-calibre applicants from all over the world

he Francis Fontan Fund for Education was set up by EACTS to support educational opportunities, foster professional development and promote lifelong relationships in cardiac and thoracic surgery for its members.

The Fund bears the name of the great Francis Fontan, the pioneering French cardiothoracic surgeon best known for his signature operation for tricuspid atresia – 'the Fontan procedure' – who sadly passed away

"Each fellow has the chance of working with leading experts in a particular field, and spending time in highly specialised centres."

Rafael Sádaba

in January 2018. Professor Fontan was the first president of our Association and remains a guiding light to this day.

In his honour, the Francis Fontan Fund offers several fellowships to young surgeons – exciting opportunities that offer the chance to learn new techniques and procedures via placement in cardiac surgery centres of excellence across the world.

To find out more about the latest activities within the Fund, as well as its growing success, *EACTS News* spoke to its Chair, Rafael Sádaba, Associate Clinical Professor at the University of Navarra, and cardiac surgeon at Complejo Hospitalario de Navarra in Pamplona, Spain.

"We now have six categories of fellowships available through the fund," said Professor Sádaba. "We only set up the Fund two years ago, but we are now receiving an increasing number of applications from high-calibre applicants. It's very encouraging and we plan to expand the number of fellowships we can offer even further in the future."

Most applications for fellowship are from young surgeons who have genuine reasons for wanting to study at centres with expertise in specific techniques, noted Professor Sádaba. "In deciding who we award them to, we consider how much that individual will potentially learn from the fellowship and how they will make use of



## FRANCIS FONTAN FUND



"We only set up the Fund two years ago, but we are now receiving an increasing number of applications from high-calibre applicants."

Rafael Sádaba

their learning in day-to-day practice."

Applications for fellowships are received from all over the world, including Brazil, India, Malaysia and China, and this international spirit extends to the lasting relationships that develop. "Each fellow has the chance of working with leading experts in a particular field, and spending time in highly specialised centres," said Professor Sádaba. "As such, the peer-to-peer relationships that are established often continue long after the fellowship has ended."

As he underlined, some of the newer fellowships are being run in collaboration with industry, securing a valuable source of revenue to help run the programme.

The six categories of fellowships on offer cover a wide range of specialities, including: advanced postoperative care in cardiovascular surgery, atrial fibrillation (in partnership with AtriCure), off-pump coronary artery bypass (OPCAB; in partnership with Medtronic), uniportal video-assisted thoracoscopic surgery (VATS), aortic root and valve repair and the EACTS MSTCVS (Michigan Society of Thoracic and Cardiovascular Surgeons) Quality and outcomes in Cardiac Fellowship.

For more details of the Francis Fontan Fund for Education please visit: www.eacts.org/ the-association/francisfontanfund

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The Postoperative Critical Care Fellowship in Adult Cardiovascular Surgery 2020: This is a four-month fellowship at the Department of Cardiovascular Surgery at the Hospital Clinic Barcelona, Spain, running from January to May of this year. This fellowship has been designed to provide the knowledge and competences required in postoperative care of cardiovascular surgery patients.

The successful trainee will engage in the perioperative management of patients undergoing cardiovascular surgery under the supervision of the department and fellowship programme director. There will be a special focus on postoperative care and fellows will be expected to acquire all of the knowledge, training and skills necessary to adhere to the European Board of Cardiothoracic Surgery (Membership and Cardiac subspecialty) during or after completion of the fellowship.

The Atrial Fibrillation Fellowship in co-operation with AtriCure: There are six fellowships available in this category. Fellows get the chance to stay in a high-volume AF ablation centre in Stuttgart (Germany), Warsaw (Poland), Nieuwegein (the Netherlands), Brescia (Italy) or Brussels (Belgium) and attend two AtriCure events, including a one-day course called 'Navigating the Maze', alongside the 'Maze IV training course'.

- The EACTS-MSTCVS Quality and **Outcomes in Cardiac Surgery Training** Fellowship: This fellowship focuses on quality collaborative activities and data analysis. This includes the chance to spend four months with the MSTCVS in Ann Arbor, Michigan, USA. Milan Milojevic from the Department of Cardiothoracic surgery at Erasmus University, Rotterdam, the Netherlands, completed the fellowship in 2018 and Chris Bond, a surgeon from the Heart of England NHS Foundation Trust, Birmingham, UK, took up a fellowship in 2019.
- **OPCAB Fellowship**: Here, the goal is to provide newly graduated cardiothoracic surgeons from around the world (especially those with an interest in offpump and minimally invasive techniques) with an educational opportunity to enhance their clinical understanding and to acquire theoretical and practical knowledge in the surgical management of patients with coronary artery disease.

The fellowship is under the guidance of leading surgeon-educators in this field. The specific learning objectives are to provide surgeons with the foundational knowledge of the pathophysiology of coronary artery disease, the rationale for its surgical treatment and first-hand experience in OPCAB and minimally

invasive cardiac surgery (MICS) coronary artery bypass grafting (CABG). As a result of this training, fellows may ascend to leadership roles and set up their own OPCAB/MICS CABG programmes in their own centres.

Uniportal VATS Fellowship in General Thoracic Surgery: This is a threemonth fellowship in uniportal access to lobectomy at Shanghai Pulmonary Hospital and Tongji University in China - a high-volume centre performing the highest number of lung-cancer resections in the world.

The successful fellow will be involved in acquiring hands-on experience in a mentor- and surgeon-led environment, which could eventually lead to performing procedures either under remote supervision or no supervision.

Aortic Root and Valve Repair Fellowship: The purpose of this fellowship is to acquire knowledge on the disease of the aortic valve and the aortic root, understand the basis for current recommendations for management and learn about optimal management.

It consists of two EACTS-organised courses, one in Windsor, UK, and another in Brussels, Belgium, plus a two-week internship in a high-volume centre (one week in Paris, France, or Brussels, and one week in Homburg, Germany, or Rome, Italy).

"We believe in the EACTS Training Management System (TMS) as a new pathway to change and improve the training of cardiothoracic surgeons in the world. It is systematic, objective, and safe, delivering to the resident and trainers an easy overview of their progress. We just started using the TMS at our centre in Brazil and we already see the results.

"The advantages are clear: A standardised logbook by the EACTS with all the procedures and knowledge gained during our residency programme, as well as crucial feedback by our Head of Training that guides us in the right direction.

"As members of the Brazilian Resident Association of Cardiovascular Surgery, we strongly believe that this tool can improve the quality of residencies in Brazil, and will do our best to turn that into a reality. Count on us!" Mariana Brandão

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#### Association

## Inspiring women in cardiothoracic surgery: you cannot be what you cannot see

Jolanda Kluin Chair, EACTS Women in Cardiothoracic Surgery Committee

he EACTS Council has decided to establish a Women in Cardiothoracic Surgery Committee, and this new committee has a noble ambition: to ensure more women surgeons become leaders in the field of cardiothoracic surgery. The aims of the committee are to:

- Broaden the opportunities for women in leadership roles in cardiothoracic surgery
- Enhance the training, educational and research opportunities for women surgeons
- Identify and promote professional opportunities in both training and leadership
- Raise awareness of opportunities in EACTS leadership and educational programmes.

Following a selection process in 2019, I am delighted to have been appointed chair of the committee. Over the next few weeks we will be establishing the committee and reaching out to other women surgeons to join us. We expect to hold the first meeting in March 2020.

Addressing the barriers that women face is no easy task, and there are no quick fixes. It will take time. We will actively encourage women in cardiothoracic surgery by promoting educational development and professional opportunities through the EACTS Annual Meeting, the Academy, and via research opportunities and fellowships. We will also identify opportunities for women in both training and leadership roles.

Empowering more capable women to be leaders brings several advantages. Not only does it mean we are more likely to address issues such as unconscious bias and internalised superiority, but we will also realise the benefits of inclusive leadership. Our workplaces and organisations will be better for it.

I'm a firm believer that you cannot be what you cannot see, so I wholeheartedly endorse EACTS' initiative to form the Women in Cardiothoracic Surgery Committee. Our committee will be a source of leadership and provide visibility for women surgeons. I want this new committee to inspire, encourage

"I'm a firm believer that you cannot be what you cannot see, so l wholeheartedly endorse the EACTS initiative to form the Women in Cardiothoracic Surgery Committee."

Jolanda Kluin



and enable women to fulfil their surgical career ambitions, and we will help women to do that by identifying and promoting educational and professional opportunities for women surgeons in the sector and within EACTS.

By addressing the barriers that so many of today's women surgeons have experienced, just imagine what the women surgeons of tomorrow could achieve.

If you would like to support our mission, please do not hesitate to get in touch via email to: stephanie.halksworth@eacts.co.uk



#### Association

## EUROMACS reaches a new milestone

he first week of August 2019 saw the registration of the 5,000th assist device implantation in the European Registry for Patients with Mechanical Circulatory Support (EUROMACS). Zuzanna Tucanova of the Institute of Clinical and Experimental Medicine (IKEM) in Prague, Czech Republic, who is responsible for the management of data of patients on mechanical circulatory support, commented: "My motivation is that I know these data are used for scientific research. This research ultimately leads to a better understanding of the influential factors for morbidity and survival in mechanical circulatory support therapy."

Ivan Netuka, Chief of the Cardiovascular Surgery Department at IKEM, added: "Now that we have reached

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the 5,000th registration, I can modestly state that our decision to participate in EUROMACS was the right one. Looking back, we are glad that the initiative to start a Europe-wide registry 10 years ago has resulted in the robust database that we have at our disposal.

"This is thanks to the fact that the EACTS, as a neutral organisation with transparent governance rules, is responsible for organising the registry and attracting new participants. Additionally, the output in terms of scientific papers is increasing. The committee members in charge of evaluating scientific study proposals received 14 study initiatives in the last 12 months, bringing the number of publications to seven, while



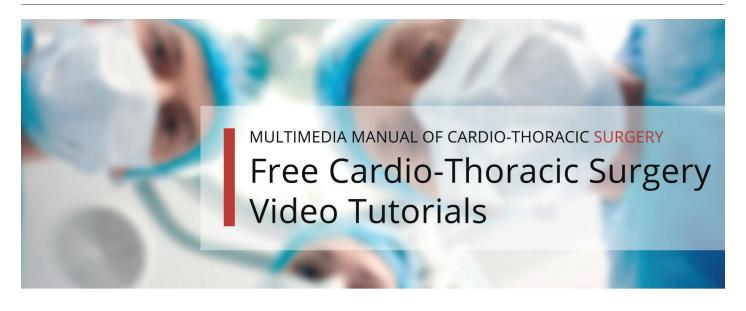
Zuzanna Tucanova

several are in the process of being drafted. These studies give us insights into the consequences of therapeutic treatments as we practise them." Dr Tucanova concluded by citing a well-known saying:



Ivan Netuka

"What is not measured cannot be improved. What is not improved, always deteriorates. The greatest benefit of having data is to gain insights for our patients. At the end of the day, this is the aim we all strive for."





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#### Residents

## Cardio-Room Rotterdam Bi-monthly, informal multidisciplinary educational meetings for residents

Amir H Sadeghi<sup>1</sup>, Adem Dereci<sup>2</sup>, Rafi Sakhi<sup>2</sup>, Rahatullah Muslem<sup>1,2</sup>, Ali R Wahadat<sup>2</sup>, Murat Arslan<sup>2</sup>

1. Department of Cardiothoracic Surgery; 2. Department of Cardiology, Erasmus Medical Center Rotterdam, the Netherlands

n the Netherlands, medical postgraduate training for cardiologists and cardiothoracic surgeons is based on an intensive and nationally regulated 6- and 5.5-year curricula, respectively. Currently, there are 11 training hospitals certified as training institutions for cardiothoracic surgeons and 42 centres for cardiologists.<sup>1</sup>

To successfully complete the training programme for both cardiology and cardiothoracic surgery, residents need to fulfil minimum required training, as recommended by both the Dutch Society for Cardiothoracic Surgery (De Nederlandse Vereniging voor Thoraxchirurgie) and the Dutch Society for Cardiology (De Nederlandse Vereniging voor Cardiologie).<sup>2,3</sup>

During the past few years, most of the residency training programmes in the Netherlands, including cardiology and cardiothoracic surgery, have adopted a competency-based training concept. This type of competency-based training aims to standardise levels of competence to guarantee that residents fulfil the minimum set of requirements to complete (parts of) their medical training.4,5 Altogether, these competencies (CanMEDS) describe several qualities of a (medical) professional and, consequently, provide a framework to guide both residents and their supervisors in residency training programmes. Additionally, since 2018, so-called "Entrustable Professional Activities" (EPA)

have been adopted in the training programmes of both specialties in order to facilitate the translation of competences to medical practice.<sup>2,3,6</sup>

Interestingly, with regards to medical knowledge - and knowledge of (inter)national and European guidelines for the management of several cardiovascular diseases - most EPAs of both cardiology and cardiothoracic surgery training programmes state the following: "The resident is required to know the most relevant guidelines, and is able to apply his/her knowledge in the management of ...".2,3 Moreover, in the national training programme document of the Dutch Society for Cardiology, it has been stated that residents are expected to study all guidelines regarding the management of cardiovascular diseases in their own time.3 However, residents struggle with questions regarding the guidelines and often need to discuss this in a multidisciplinary setting to comprehend the significance of the guideline.

As an enthusiastic and motivated group of cardiology and cardiothoracic surgical residents in Erasmus Medical Center, Rotterdam, we have initiated an innovative bi-monthly multidisciplinary (cardiology, cardiothoracic surgery) residents-only-meeting to present, discuss and study the most recent guidelines for the management of cardiovascular diseases. Moreover, during these interactive meetings, we teach each other about more specialism-specific topics (e.g. extracorporeal bypass and transcatheter techniques).

In this article, we will provide a short description of our bimonthly meetings. Through this, we aim to inspire other residents and supervisors in the world to initiate their own periodical, multidisciplinary and informal meetings to study and discuss guidelines and fieldrelated literature.

#### Cardio-Room: How it all began

Cardio-Room Rotterdam was initiated in May 2016 during an informal dinner. After creating a WhatsApp group and adding some members (residents in both cardiology and cardiac surgery), we started brainstorming on how to organise our bi-monthly meetings. In the meantime, we used our Cardio-Room WhatsApp group to share and discuss informative (anonymous) clinical cases in terms of interesting electrocardiograms, echocardiography videos and other rare cases. Moreover, our WhatsApp group was used to share the most recent guidelines and literature in the cardiacsurgery and cardiology fields.

Eventually, on 1 September, 2018, we organised our very first Cardio-Room meeting to discuss the European Society of Cardiology (ESC) Guidelines on Infectious Endocarditis.

#### The meetings

After creating a schedule which would comprise all ESC guidelines, each guideline was selected and prepared by all participants by choice. Due to the extensiveness of the guidelines, every meeting was scheduled to include only one guideline presentation. The meetings are generally scheduled bi-monthly at a time that suits all members of the group. All meetings were held at the residency of one of the members, which stresses the informal setting of the meetings. The member who prepares the meeting focuses on several aspects of the guideline, including the contents of the chosen guideline and their implication for clinical practice.

Moreover, the similarities and differences between the ESC guidelines and local hospital protocols are examined and the rationale for the discrepancies are discussed. In addition, the scientific background for key recommendations, as well as recently published scientific papers that could potentially

(From left) Rahatullah Muslem, Adem Dereci, Amir H Sadeghi, Ali R Wahadat, Murat Arslan and Rafi Sakhi.



alter these recommendations, are debated. Finally, clinical cases are put forward as an exercise to enable members to practice with the newly acquired knowledge. After each meeting, the sessions are evaluated and participants are encouraged to bring forward new ideas that could potentially improve the meetings. All presentations are uploaded afterwards to a Google Drive folder that is accessible to all participants.

#### Conclusion

The Cardio-Room Rotterdam is an innovative bi-monthly meeting that brings together cardiology and cardiothoracic surgery residents to discuss and study the most recent guidelines in the fields of cardiology and cardiac surgery. We believe that by encouraging these types of multi- and interdisciplinary meetings and training sessions during early residency, we can stimulate better future collaboration and understanding between cardiologists and cardiac surgeons.

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#### Residents

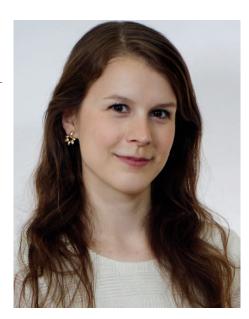
## Resident activities at the 33rd Annual Meeting

**Miia Lehtinen** University of Helsinki, Finland and Kymenlaakso Central Hospital, Kotka, Finland; on behalf of the EACTS Residents Committee

uring last year's Annual Meeting in sunny Lisbon, the EACTS Residents Committee was very pleased to see that rooms were filled for the sessions arranged specifically for EACTS trainee members. The intense three-day programme provided a variety of step-by-step instructions for new surgical techniques, advice for trainees in the early stages of an academic career, career development guidance to balance academia, clinics and family life, and casual lunch discussion. Furthermore, reports on nightmare cases were revealed - ones that you would never wish to encounter yourself. The first joint session between the EACTS Residents Committee and the European Society of Cardiology (ESC) Young Community was a very special moment; young representatives from both organisations discussed interdisciplinary cases with a true heart-team approach.

It was very refreshing to witness that, despite long hours in the operating room and the wards, European trainees also showed an interest in life outside the traditional hospital environment. In this year's 'Outside the box' session, the room was packed with residents keen on hearing about experiences from surgeons who had helped to build modern cardiac surgery units in crisis areas. At the end of the session we also had a real-life reminder of how a surgeon can make room for other passions in life, too, demonstrating that it is indeed possible to adjust a busy work schedule to dedicate time for hobbies completely outside the hospital world (and probably a healthy idea for all of us).

This year, the Residents Committee also



invited representatives from national resident societies to present difficult cases in the session 'Help! Trainee in Trouble'. In some countries, intense pre-meeting competitions took place to decide who would get the chance to present their interesting case at the Annual Meeting. We heard exciting reports by residents from France, the UK, Portugal, Switzerland, Germany and the Netherlands. The distinguished expert panel gave our brave presenters a hard time, asking some very tough questions, but the young surgeons did an amazing job in keeping a cool head in front of the international audience - not an easy feat even for an experienced surgeon!

Three days is quite a short time for a huge international conference like the EACTS Annual Meeting, and you may have missed some of the interesting programme due to another clashing session. But there may be a chance to recap some of that missed session afterwards: in Lisbon the Residents



Committee were also actively involved in the EACTS TV studio where many of the hottest topics from the conference sessions were discussed by an expert panel of top names in the field. These clips (5–15 minutes in length) can be found on the EACTS web archive for anyone to watch.

#### **Future plans**

The Residents' sessions at the Annual Meeting are arranged specifically with EACTS trainee members in mind. Thus, in Lisbon we tried to go around and ask our resident colleagues for some feedback to further improve the Residents Programme and to better respond to your specific needs. We aim to critically evaluate our current programme format and hope to make some rearrangements for this year's Annual Meeting.

For example, we plan to have more informal activities, including: relaxed lounge discussions between senior surgeons and trainees; evening activities outside the conference halls; and, hopefully, even more collaboration with national resident societies and colleagues from the ESC Young Community. We also aim to expand our activities outside of the Annual Meeting so remember to check your email for updates from the Residents Newsletter.

And if YOU should have any ideas to help our work and improve what EACTS has to offer for residents, please feel free to contact us via the EACTS webpage!

Head to www.eacts.org/resources/residents/ communication to sign up for the Residents Newsletter or to contact the Residents Committee directly.

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Raising Standards through Education and Training