



In this issue

- 2** Interview with EACTS Secretary General Domenico Pagano



- 5** Resident perspectives from Vienna



- 6** The Francis Fontan Fund

- 8** EUMS raises standards in education and training

- 9** Jeopardy competition

- 10** EACTS Clinical Guidelines Committee

- 14** The MITACS course, 2018

- 18** QUIP & EUROMACS



- 21** STS/EACTS Latin America Cardiovascular Surgery Conference

- 22** EACTS Award Winners 2017

In this issue we have an exclusive interview with new EACTS Secretary General, Domenico Pagano, who discusses his career, personal life and his ambitions. You will also meet Resident Committee members Miia Lehtinen and András Durko, who will tell you more about the work of the residents committee, as well as giving residents some helpful guidance through the EACTS Annual Meeting Programme.

You will also find the latest news on the Quality Improvement Programme, the Adult Cardiac Database and EUROMACS, the European Board Examination and

the Francis Fontan Fund. We look forward to the 13th European Circulatory Support Meeting, **EUMS 2018**, in Berlin and other EACTS Academy courses. More information on the EACTS Academy courses can be found on the EACTS website www.eacts.org

Spring and Summer are always busy times at EACTS as during that time we are running up to our Annual Meeting. Programme committee members, domain chairs and domain members, EACTS (resident) members, reviewers and staff develop a stimulating scientific programme. This year, the EACTS Annual

Meeting will undergo some significant changes: from a five-day programme the meeting will be reformed as a three-day meeting!

Lastly, EACTS mourns the passing of our founding father and our first president, Francis Fontan. In this issue you will read more about his life and his accomplishments. Francis Fontan was the guiding spirit of our Association and our thoughts are with his wife and family.

We hope you will enjoy this issue of *EACTS News* and we look forward to seeing you at one of our courses and at the Annual Meeting in Milan!

The EACTS Team

ICVTS is moving to an online-only publication

In response to changing customer needs, the editors and publishers of the journal of Interactive CardioVascular and Thoracic Surgery (ICVTS) have decided to phase out print and invest further in digital content and services. We intend to present more and more information through high-quality, content-rich videos.

As of July 2018, ICVTS will become an online-only publication; Volume 26 Issue 6 will be the last printed edition. Moving to an online-only publication will not only enable us to provide more video content, but also focus on improving our platform so that members can continue to:

- Access the journal from a variety of devices such as laptops, mobile phones and tablets
- Read articles instantly on the day of publication, rather than waiting for printing and dispatch to be completed
- Watch high-quality videos
- Easily cite and share papers of interest
- Search past and present issues by topic, area of interest, or author
- Download papers for off-line reading



The move to online-only will provide market-leading functionality to all users; none of which can be offered in the print environment. Readers are guaranteed access to the most current versions of all articles at all times, and immediate access to the most recently published content via the Advance Access feature. On the fully responsive Oxford Academic platform, user experience will be enhanced with access to digital components of content, usage information and

citation data, reference linking, and other vital metrics. In addition, the journal website is fully mobile-responsive which means you will see the same up-to-date content on the site regardless of device, and in a format that suits the dimensions of that device.

The editors are excited to launch this next step in the journal's progression and have been working hard to ensure they bring extensive improvements to users.

Visit <https://academic.oup.com/icvts>

Exclusive interview with EACTS Secretary General Domenico Pagano

EACTS Secretary General Domenico Pagano is Consultant Cardiothoracic Surgeon at University Hospitals Birmingham (UK), a position he has held since 2002. He is also Professor at the University of Birmingham, and chairs the Quality and Outcomes Research Unit at University Hospitals Birmingham.

Appointed as incoming Secretary General of EACTS in 2016, his official start was October 2017 following his General Assembly approval in Vienna. He is the International Director on the Board of Directors of The Society of Thoracic Surgeons (STS) in the USA, and the Treasurer of the Board of Directors of the Cardiothoracic Network.

Dr Pagano discussed his life and work in conversation with EACTS News.

You grew up and studied in Italy, at a certain point opting to continue your training in the UK. What motivated you at the various stages of your career?

I was born in Pompei, under Vesuvius (so I am quite used to living under threat!). In my early education I followed the classic educational track, which led me to travel to attend the Liceo Classico GB Vico in Nocera Inferiore, Salerno. I really enjoyed the classical studies, which included Philosophy, Greek, Latin, History of ancient cultures, and so on. Then I entered medical school, the second faculty of the University of Naples, and I graduated in 1987.

During the last 18 months of medical school, I was an intern in the coronary care unit, because initially I wanted to be a cardiologist (not many people know this!). It was then, when I was in the coronary care unit, that I thought there was something missing. I liked the heart, I liked the physiology and acute cardiology, but again there was something missing.

After my graduation, I went to watch a heart operation in Bologna, where the Director was Professor Angelo Pierangeli. This is where my passion started. I moved to Bologna as a volunteer in the department of Cardiac Surgery of the Ospedale Sant'Orsola, which was an old convent. I liked cardiac surgery because it encompassed many aspects of medicine. And I liked the

journey to treat a patient's condition: you see patients, you assess their condition, you decide the indication for the operation, and as a surgeon you are involved in the intra-operative management and post-operative care on the ITU (at that time, surgeons were looking after patients, not the intensivists). I was taken by these challenges, the advances in technology, and the multidisciplinary approach of the specialty.

Unfortunately, it was difficult to progress with hands-on training in Italy. It would have been a much longer career, rather than if I moved to somewhere where there was a more apprentice-type approach.

I moved to England in July 1988 – without a job. I came as an observer to Mr Donald Ross at the Heart Hospital in London and I used to spend the day with him in the operating theatre. I looked after myself by doing several small jobs including being a waiter in an Italian restaurant. Then I got some locum senior house officer positions which led to me entering a formal training programme in surgery first and then cardiothoracic surgery.

What are your passions besides cardiothoracic surgery?

I have several interests, but I don't have the time to pursue them! To be frank, my professional life is so varied: I can spend a day in the operating room, a day doing research, a day in the outcome research unit. I spend time at EACTS, with my clinical fellows and with my research fellows.

I travel a lot in my personal life. I like food and wine. I cook a lot. I read books. I don't do as much sport as I did before. I don't have the time to do it. I still have an interest – a passion – in the Bronze Age, in the Mycenaean civilization. This is the period of the Iliad. Early in my career I applied for a Masters in Ancient History at the University of Birmingham, and got accepted, but I had to shelve the idea. That is something I intend to pursue again in the future, and travel to the areas of Mycenae, Troy and the Aegean sea.

What has been the significance of your classical education in Italy? Was the transition to a scientific discipline difficult?



I was invited back to my old school in Italy two years ago to give a lecture to the students on the relevance of classical education in a scientific profession. In Italy, there is a debate on the usefulness of classical studies for those who wish to pursue a scientific career like medicine.

First of all, I think that medicine is a humanitarian science, not only a scientific subject. The humanistic background is very important when dealing with patients. I would say, 'it teaches you how to treat a patient with a condition, rather than a condition in a patient.'

During that lecture I touched upon the foundations of science and methodology, such as Aristotelian logic, Socratic doubt, the empiric method and the principles of ethics – all things that are useful for scientific careers. I personally see the formative early years of education as being decisive for the person, with acquisition of general knowledge and ethics.

You lead the Quality and Outcomes Research Unit (QuORU) at University Hospitals Birmingham. What are your aims here in terms of improving care delivery?

It has been said that if you don't know the outcomes of what you are doing, you should not be doing it. That is why we created data collection databases to measure and compare clinical outcomes. There is a quote from a UK surgeon: 'The only way to keep the surgeon safe is to keep the patient safe.'

I established a benchmarking database for EACTS, where units contribute data and can benchmark themselves against other units. This is an online tool, in real time, and we now have data from about 75,000 patients. This database will hopefully drive quality improvement, and will decrease the variation

"I have several aspirations. First, to increase the global influence of the EACTS. It would be nice to say that, although we have the title 'European', we actually are global."

Domenico Pagano

in outcomes in different units.

I see this cycle of quality: we see a problem, we create clinical guidelines to address that problem, we implement the guidelines, and measure their impact. We are very close to delivering that now. It has taken since 2012 to achieve it.

What are the objectives of your role as Secretary General?

I inherited the EACTS in a very healthy position from my predecessor, Pieter Kappetein, in many areas. But there are also opportunities for development in other areas. I have inherited an association that has now established itself as one of the biggest associations of cardiothoracic surgery in the world. The Annual Meeting is the most attended meeting in the world. It is also one of the youngest associations in the world with only 31 years of history.

I have several aspirations. First, to increase the global influence of the EACTS. It would be nice to say that, although we have the title 'European', we actually are global. My quest is that we tap leadership from wherever it is in the world. For instance, you could be a member from anywhere in the world but you could occupy a high leadership position in the Association. To increase participation in the different activities of the Association and to create a fertile ground for leadership to thrive, those who are involved in the delivery of activities can come in very early into leadership according to their interests and abilities. This is a land of opportunities for everyone.

In addition, we need to look at the next generation of leaders within the Association. My intended role is to promote and attract more membership from junior trainees around the world so that they can come in early. The advantage of having juniors involved is that they are more in touch with innovations. They are more likely to adapt to change, and they bring an enormous wealth of enthusiasm,

"I see this cycle of quality: we see a problem, we create clinical guidelines to address that problem, we implement the guidelines, and measure their impact. We are very close to delivering that now. It has taken since 2012 to achieve it."

Domenico Pagano

vision and ability to the table. Always in my career I have enjoyed having top-class juniors with me. I have learned a lot from them. They influence my thinking in many ways.

There are also practical things we need to improve. I think that competition among international cardiothoracic associations should be transformed into collaboration opportunities. In the end, we are here to improve the care of our patients. We do this by delivering education, presenting research, promoting the exchange of ideas and by providing a platform for innovation. And we can do that together. We need to find more and more areas to collaborate in. Everybody will benefit.

The Association's membership has historically been made-up mainly by surgeons. But actually we are in a multidisciplinary environment in which there are different professions treating the same patients. So I would like to embrace a more holistic role. We want to attract healthcare professionals like clinical perfusionists, nurse specialists, assistants and anaesthetists,

reaching out in a more multidisciplinary role.

The other area in which we can make a difference is by not only providing a structured educational programme, but also providing the tools to assess the knowledge. We have done that by providing juniors with an electronic portfolio where they can record all their procedures, wherever they are. It can be accessed by their trainers. We can set them standards for their training. We can set a syllabus. We have an exam now, the European Board of Cardiothoracic Surgery, but we also want to develop a programme for people like me, already established, for professional development.

Given its growing scale, it seems pertinent to ask how an organisation such as the EACTS deals with economic – and even cultural – variation between the different countries that make up its membership. Is this an opportunity as well as a challenge?

First of all, the EACTS is a charitable organisation registered with the Charity Commission UK. We are a non-profit organisation, so we subsidise quite a lot of the activities that we do. We keep, for instance, the registration fee for our annual meeting low. The members fee is low and comes with a lot of valuable benefits. We have now established a Foundation named after our late founding father, Francis Fontan, which gives fellowships and scholarships for people in training and also for those at the early stages of their operating career.

We will also be involved more and more in supporting areas in need. For instance, with the STS, we go to Cartagena in Colombia, Latin America, and we are in the process of establishing some supportive activities for areas in need of development.

In terms of culture, one of the challenges in our organisation is the huge variation among different geographical areas. It is certainly a challenge sometimes. But I also see an opportunity for people to use different languages to deliver the same message, so that people can understand it. For that reason, I would say that we are more likely to be a global organisation.

The fabric of Europe is multicultural. The Association was formed 31 years ago, with the last war in Europe finishing about 30 years before that. We were very culturally separate before that, but EACTS brings us together.



"[There is] huge variation among different geographical areas. It is certainly a challenge sometimes. But I also see an opportunity for people to use different languages to deliver the same message."

Domenico Pagano

Francis Fontan, 1929 – 2018

Marko Turina University Hospital of Zurich, Switzerland

EACTS mourns the passing of its founding father, the first president and guiding spirit of the Association.

Francis Fontan was born 1929 in the city of Ney, in the province of Béarn, France. He started his medical studies in Bordeaux and began his surgical education ("internat") in 1952. Trained both in surgery and in cardiology (he was a staff member in the cardiology department, probably the only surgeon in those times with such experience), he started his surgical training with Georges Dubourg and continued at the University of Bordeaux, where he became full professor and Chief of Cardiac Surgery at CHU de Bordeaux in Hôpital cardiologique de Haut-Lévêque in Bordeaux-Pessac.

Francis Fontan's name will always remain connected with the operation he designed to treat tricuspid atresia. This innovative operation, the Fontan procedure, still bears his name today. After a series of (unsuccessful) animal experiments, this operation was first performed in a 12-year-



old patient, who survived after a stormy postoperative course.

His first two patients were described in a French journal (*Ann.Chir.Thorac. Cardio-vasc.de Langue Francais*) in 1971, and were followed by his first English presentation of 13 cases in Thorax in the same year. This

procedure, with its numerous modifications, is still the mainstay of surgical treatment of various congenital anomalies where biventricular repair is not possible.

In the early 1980s, Francis Fontan became disappointed with the scientific level of cardiosurgical meetings in Europe, where the nationality of presenters seemed to be more important than their scientific achievements, and he recruited a group of younger academic surgeons to create a new, European organisation for presenting and publishing scientific research originating in Europe. The first meeting of the new organisation, the European Association of Cardio-Thoracic Surgery, was held in Vienna in 1986, and became a huge success. Within a few years, the majority of European cardiothoracic surgeons joined this association, which today organises a scientific meeting with world-wide attendance at the highest professional level, and publishes three scientific journals which successfully compete with their American counterparts.

Francis Fontan always considered the creation of EACTS to be his most important accomplishment.

Keep up to date!

Log in regularly to your EACTS account!

Regularly log in to your account and keep your details up-to-date to receive all the latest news and information from EACTS. EACTS takes your privacy seriously and will only use your personal information to administer your account and to provide you with information you have requested. You can, however opt out of our mailings at any time by emailing info@eacts.co.uk.



Highlights from Vienna

Resident perspectives

Miia Lehtinen University of Helsinki, Helsinki, Finland and Kymenlaakso Central Hospital, Kotka, Finland

With more than 4,000 visitors attending the 31st EACTS Annual Meeting in Vienna, this grand historic venue also welcomed a delightfully large number of residents. Already by the entrance hall, the young future surgeons were able to get inspired by watching the live Meet the Expert interviews with many high-profile names sharing the news about EACTS activities and their latest scientific or clinical work in the field.

As the interest in basic science amongst surgeons is alarmingly decreasing, it was a delight to see a full lecture hall for Saturday's Translational and Basic Science Course. High-level presentations describing all topics from lung-on-a-chip to tissue-engineered vascular grafts generated keen discussions between speakers and the audience, and hopefully gave courage and food for thought for any starting surgeon-scientists.



As the number of concomitant and equally interesting sessions (featuring very detailed state-of-the-art topics) may sometimes feel overwhelming for residents at this kind of big meeting, it was a pleasure to also attend sessions with broader topics, each providing a great overview of the field. The "Rarities in Cardiothoracic Surgery" session covered five procedures that are less well-known for residents undergoing their training today. "Nightmares in Cardiothoracic Surgery" gave examples of how simple cases may turn terribly complicated. This could happen to anyone, at any stage of their career.

As the clinical training in this field requires both technical and mental skills, residents also had their nerves tested in a couple of sessions. This year, many of the abstract sessions, for example the Young Investigator Award, were organised as Rapid Response sessions: you got two minutes to state your project's superiority, using just four slides, which was then followed by a six-minute discussion. These exciting and dynamic sessions saw many young talents fully convincing us with their results in just two minutes.

Another real challenge for each year is of course the nerve-racking Jeopardy session, with tough competition between national teams in a quiz-style contest. If you are on the edge of participating next year, here is something that may be a game-changer: the prize is a ticket to the STS Annual Meeting in January 2019, held in sunny San Diego, California, USA.

At the EACTS Annual Meeting, the EACTS Residents Committee took the initiative to provide more social interaction aimed specifically at residents. Like last year, the Resident's Luncheon brought residents and experts to the same table, to discuss clinical work, career choices

and anything about life as a cardiothoracic surgeon in general. Next year, remember to book your seat early, as the tickets were sold out fast. But if you missed your spot in the luncheon, you were still able to catch up and relax between sessions with fellow residents on the sofas of the new EACTS Residents Lounge, held throughout the meeting in the Exhibition Hall.

Although everything good must come to an end, and the inspiring EACTS Annual Meeting lasted for only five days, there is no reason why you should not finish in style. This year, the Residents Committee organised a "Get Together Party" in the lively city centre of Vienna. Equally embraced by both residents and senior surgeons alike, the dancefloor stayed full until the early morning.

After a very successful Annual Meeting, the forthcoming year will provide many opportunities for active residents to join in EACTS activities. Following the initiative of the Secretary General, all EACTS Task Forces will now invite resident members to participate and plan an even more excellent programme for the next Annual Meeting in Milan.

András Durko Erasmus Medical Center, Rotterdam, the Netherlands

At last year's Annual Meeting in Vienna, there were many moments to remember from a resident's perspective.

To name but a few: Saturday's Techno College sessions on innovative techniques, "live-in-a-box" presentations (where procedures were explained step-by-step), pro-con debates regarding important everyday questions such as prosthetic heart valve choice, or the honest discussion of complications during the "nightmares in cardiothoracic surgery" session.

In addition, plenty of opportunities were offered for trainees for to develop their manual skills under expert supervision: coronary, aortic root and mitral valve workshops were organised by the industry, as well as an arterial switch drylab session by the congenital domain.

The Jeopardy competition, organised for national resident teams, has a three-year history now. This year, the UK team won, their prize being tickets to the Society of Thoracic Surgeons (STS) meeting (January, 2018) to compete in a final against the American winners.

"This year, many of the abstract sessions, for example the Young Investigator Award, were organised as Rapid Response sessions ... These exciting and dynamic sessions saw many young talents fully convincing us with their results in just two minutes."

Miia Lehtinen

Highlights from Vienna

Continued from page 5

Besides the scientific programme, the Annual Meeting offered numerous possibilities for residents to socialise. The traditional football tournament for national teams took place during the weekend – this time topped off with Wiener schnitzel and beer at the end. Participation is highly encouraged next year too. Tuesday's Residents Luncheon was a good opportunity for residents to discuss serious or less serious issues related to our specialty with leaders in cardiothoracic surgery while enjoying a tasty lunch in a relaxed environment. Participation was sponsored by EACTS and free for residents; only registration was required at the EACTS helpdesk in advance.

Last year, many new initiatives from the Residents Committee were introduced with the intention of bringing residents



“Last year, many new initiatives from the Residents Committee were introduced with the intention of bringing residents closer together.”

András Durko

closer together. For the first time, a Residents' Lounge was organised in the Exhibition Hall (EACTS Booth) to provide a designated place for residents to meet and socialise.

Last but not least, the launch of the EACTS Training Management System during the Annual Meeting deserves residents' attention. This free-of-charge, online system developed by EACTS offers the possibility for residents to record their procedures and keep a closer eye on their professional development.

Looking forward to meeting again in Milan!

More information on the Training Management System (Page 11-12) can be found at: <http://www.eacts.org/educational-events/training-management-system/>



FRANCIS FONTAN FUND

J Rafael Sádaba Complejo Hospitalario de Navarra, Pamplona, Spain

It is part of the EACTS mission to advance education in the field of cardiac, thoracic and vascular interventions. EACTS is the leading educational organisation for cardiac and thoracic surgery in Europe, and among the best in the world. The EACTS Annual Meeting is the largest of its kind worldwide, and its educational value is undisputable. The EACTS Academy, launched in 2012, offers a high quality educational programme to suit a range of levels, from trainee through to experienced surgeon.

As of January 2018, and because of the application of the MedTech Europe (MTE) code of conduct, industry has ceased the direct support for healthcare professionals to attend scientific and educational events organised by third parties. Nevertheless, industry will continue to organise their own educational activities, and will be able to fully support attendance of health care professionals there. Events organised by industry are already strictly regulated, and will continue to be so under the new MTE code. That being said, these activities will arguably be designed to promote and market their own products, with the danger of conveying biased education. In this context, EACTS remains devoted to the continued provision

of high-value education through its different educational initiatives, and in expansion of its educational portfolio.

The EACTS Francis Fontan Fund for Education has been created to support educational opportunities, foster professional development and promote lifelong learning in cardiac and thoracic surgery for its members. Our aim is to support these educational activities in a transparent and fair manner, and subject to strong governance procedures.

In times of uncertainty about the future of postgraduate education, our vision is to make independent and high-quality education accessible to EACTS members. Once again, despite the MTE code of conduct, it is expected that major companies will remain committed to support medical education, and will continue working closely with scientific societies and professional congress organisers (PCO) to find optimal ways of doing so, while ensuring full compliance with the new code.

The Fund will seek and attract funding to support the educational portfolio of EACTS with the aim of financially supporting courses run by the Academy in Windsor and elsewhere, as well as a number of grants and fellowships organised by EACTS. The Fund will enable partnership with industry to promote independent education in cardiac and thoracic surgery.

The activities of the Fund are organised



by the Francis Fontan Fund Steering Committee, which is primarily responsible for strategy and fundraising. A subgroup of the Steering Committee will form the 'Executive Committee', which deals with the 'grant-giving' activities. The Fund has already supported four grants. Two of them, in collaboration with the organisers of the Birmingham Review Course in Cardiothoracic Surgery, are aimed at surgeons taking the EBCTS examination.

Another two grants were supported for members from South America to attend the STS/EACTS Latin America Cardiovascular Surgery Conference in Cartagena (Colombia). For 2018, and through an Educational Grant from AtriCure, the Fund will support an Atrial Fibrillation Fellowship for two members.

More information on the EACTS Francis Fontan Fund for Education can be found at: <http://www.eacts.org/the-association/francisfontanfund/>

The first European Board of Cardiothoracic Surgery Level 1 Examination (MEBCTS)

Eduard Quintana and

Stephen Clark on behalf of the EBCTS members and question panel writers.

The development of a modern fit-for-purpose examination to assess professional knowledge, skills and competences is a priority of EACTS.

In October 2017, the new EBCTS Section 1 (MEBCTS) MCQ exam was successfully delivered in Vienna.

In preparing the examination, there was a tremendous and sustained effort by the EBCTS and EACTS, an international question writing panel, educationalists and highly skilled administrative support to make this high-stakes exam possible. The 180-question examination in the generality of cardiothoracic surgery covered the newly written 2017 EBCTS Syllabus and – for the first time within our professional Association – an examination with well-defined contemporary standards and strict methodology was provided.

The names of the successful candidates that achieved the EBCTS Membership have been published on the EBCTS website.

Before setting the final pass mark for the examination (using the well-established Angoff methodology), a thorough objective analysis of the entire exam was undertaken by the Board, an expert educationalist and a panel of senior surgeons. Every question was scrutinised, its performance analysed, and measurements of stability and accuracy were made. Several statistical items (point biserial, discrimination power, quintile distribution, percentage of correct candidates) were looked at to ensure the appropriateness and quality of each question. The analysis revealed that the MEBCTS examination was reassuringly considered a very robust and high-quality tool for assessment and justified the substantial efforts that had been made in its development.

Candidates were asked to complete feedback surveys a few weeks after the examination and before receiving their final result, and extremely useful data can be drawn from the anonymous responses. The survey of candidates will improve EACTS/EBCTS educational activities and the quality of exam deliverance. Additionally, a better understanding of candidates' background, preparation and aspirations can be achieved.

There has been a lot of discussion about who should take the exam, from where, when and why. Thus, a look into the recent candidates' characteristics is worthwhile.

Training varies significantly across Europe and the World, and so does practice after national certification. In terms of

individual practice, 80% were focused on cardiovascular surgery alone whilst only 2% of candidates were practicing as pure thoracic surgeons. The remainder had a mixed practice. Around 50% of candidates were currently practicing in Europe. It is interesting to appreciate that only 10% of candidates were women; we expect this to grow significantly in the future.

Although the examination is only mandatory for our Swiss colleagues, more than 40% of candidates felt that certification would represent a benchmarking of quality in the field.

The first group of candidates included a

87% of candidates stated they would recommend the MEBCTS examination to their colleagues.

quite senior group of surgeons with 40% older than 40 years. More than 50% of all candidates had more than six years of practice after training at the time of examination, and the spectrum of candidates ranged from recently graduated surgeons to those with more than 10 years of individual practice.

The ability to discriminate the minimally competent candidate in a health professional examination represents a major safety net in avoiding harm to patients. The bar is set high to reflect the need for high standards in practice, quality and patient safety. The

72% of candidates felt the MEBCTS examination was the best examination they had ever taken in their entire medical career.

pass mark is therefore necessarily relatively low. It has to be remembered that the standard of a successful candidate for this exam is well defined: "The standards are set to award certificates from the Board to surgeons who have attained levels of knowledge and proficiency that can be recognised as appropriate for early and established independent specialist practice in the generality of cardiothoracic surgery and subspecialist areas."

More than 40% of candidates felt that they should have prepared better before taking

the examination, although 84% believed that the examination had the ability to discriminate a minimally competent surgeon and a similar proportion would recommend the examination to their colleagues.

There was an almost unanimous feeling that the administrative support, EBCTS website, the application format, instructions for the examination and the venue for the exam were satisfactory. The perceived high quality and detail of the examination by the candidates was extremely high (more than 95%). In fact, over 70% of candidates felt the MEBCTS examination was the best examination they had ever taken in their entire medical career in terms of quality. They recognised that answering the questions was not a mere simple recall process but required higher-order thinking in clinical scenarios related to daily practice.

Going forward it is our intention to specifically support preparation for the examination through the academic activities of EACTS throughout the year and the Annual Meeting, mapping educational events to the EBCTS syllabus. This is already an ongoing task to facilitate delivery of knowledge and hopefully provide a catalytic effect of feedback in learning.

Another Section 1 examination will be scheduled for October 2018 and the first Section 2 examination to obtain the Fellowship level in each subspecialty will be delivered for the first time this year also.

In summary, the huge efforts in designing and delivering a high stakes contemporary professional examination have been rewarded by excellent feedback from candidates who considered it of high quality and relevant to their professional requirements.

Future candidates should ensure that their preparations reflect the level required of the examination and the breadth of the syllabus to ensure success. It is also a call to our surgical community to improve training and education to best prepare colleagues for this assessment.

The examination puts the highest quality and patient safety at its forefront and provides a clear demonstration that successful candidates are able to provide state-of-the-art surgical care. EACTS and EBCTS will continue to raise the standards in our specialty through education, training and now high-quality assessment.

.....
If members of EACTS are interested in participating in EBCTS activities please contact Amanda Cameron, Eduard Quintana or Stephen Clark at ebcts@eacts.co.uk



Raising standards in education and training in the growing field of mechanical circulatory support

The European Mechanical Circulatory Support Summit (EUMS) has evolved over past years into the largest European meeting focusing on all aspects of mechanical circulatory support. The 13th EUMS will be hosted this year in Berlin, Germany. The Course directors are Jan Gummert (HDZ NRW, Bad Oeynhausen, Germany), and Volkmar Falk (DHZB, Berlin, Germany).

The three-day course will comprise interactive lectures, live-in-a-box cases and keynote presentations and will appeal to a wide target audience of cardiologists, heart failure cardiologists, emergency and ICU specialists (ECLS), cardiac surgeons, perfusionists, heart failure nurses and ventricular assist device (VAD) coordinators, medical industry representatives (cardiac devices including ECMO development and production), paediatric cardiologists and congenital heart disease surgeons.

If you are interested in learning more about the topics below, attendance at the Summit is critical for you!

- How to find the right treatment for the right patient at the right time
- Use of temporary MCS systems in emergency situations and in the ICU
- Recent recommendations for VAD use from major societies and from recently



Jan Gummert



Volkmar Falk

published guidelines

- New surgical techniques for VAD implantation, as well as unusual solutions of complex surgical problems in VAD patients
- How to avoid long-term complications during VAD treatment
- Shared care and the role of social media for VAD patients and caregivers
- Myocardial recovery in children and adults

- Reviews of the latest developments and perspectives in the VAD field

We will also be holding the third EUMS Rising Stars Quiz, so register your team now!

We look forward to welcoming you to Berlin in November.

For further information and to register:

<http://www.eacts.org/educational-events/programme/EUMS-2018/>

What delegates said about EUMS 2017...

"Great Summit. thank you!"

"Perfectly organised!"

"Great job!"

"Fantastic meeting, and I encourage the continuity!"

95% attendees said that they would recommend this Summit to a friend or colleague.

13th European Mechanical Circulatory Support Summit; 1-3 November 2018, Berlin, Germany

Programme:

THURSDAY 1 NOVEMBER

- Part I: The Heart Failure Patient – drugs, clips, device therapy – the right treatment for the right patient at the right time
- Part II: Guidelines in Practice – the Transatlantic express
- Part III: Temporary MCS
- Part IV: The Frail Patient
- Part V: Weaning

FRIDAY 2 NOVEMBER

- Part I: The RV-challenge
- Part II: The LV-challenge

Part III: The Device Challenge

Part IV: How to Reduce Side Effects of Long-Term LVAD Therapy

Part V: Shared Care

SATURDAY 3 NOVEMBER

Part I: Paediatric

Part II: Intelligent Pumping and smart materials

Honorary Lecture: Xenotransplant will replace VAD Therapy, A Haverich, Hannover

Part III: Unusual Cases and Creative Solutions

Part IV: Update of Current and Prospective Devices



Pieter Kappetein poses the questions at the Jeopardy competition in Vienna



Joshil Lodhia (left) and Priyad Ariyaratnam

Jeopardy!

Compete in Milan for your chance to attend the STS 2019 Annual Meeting in San Diego!

Joshil Lodhia and Priyad

Ariyaratnam Health Education Yorkshire and the Humber, UK

We were encouraged to enter Jeopardy by our Deanery Training Programme Director, Professor Mahmoud Loubani. We are both UK national trainees (residents) based in the Yorkshire and Humber Deanery in the north of England: Josh is a resident in his fourth year (out of eight) in cardiothoracic training, and Priyad is in his fifth year. We performed the online screening exam for the competition which was very tough. It covered basic science and applied clinical questions in congenital, cardiovascular and thoracic surgery. The questions are different for each candidate, and it is strictly timed so there really isn't time to cheat!

We were quite surprised to make it to the knockout stages. We studied for the EACTS semi-finals from the TSRA curriculum, but the questions were very random, ranging from the history of cardiothoracic surgery to the anatomy of the trachea. The format of Jeopardy is such that you have to be tactical as well as being able to think quickly. At each turn, one team chooses a square on the screen in front of them that has a topic and money associated with it. Each team (out of three) then has to answer the question (read out by the very charismatic Jeopardy host Pieter Kappetein) associated with that square before the other team buzzes. You lose points for the wrong answer and the "double jeopardy" square means you can win double

or lose double, which can hurt. Sometimes it is the team that is least adventurous that wins, and that's probably how we made it through the semis on that Sunday at the Annual Meeting last year.

That Sunday night, we went for an industry-sponsored meal at a former Habsburg palace in Vienna with our hospital group. Despite the enchanting surroundings and finely prepared Austrian cuisine, we remember not being able to enjoy our dinner too much as we were bombarded with fiendish practice questions from our consultants and colleagues from obscure textbooks and websites via their mobile phones; they genuinely wanted us to come home with the prize. Probably as much as us. Needless to say, we didn't get much sleep that night.

The final itself was an unforgettable experience. We started quite poorly. Our opponents from Madras were really very good and quick off the mark too. Their

"We strongly encourage residents to get involved in Jeopardy this year ... We also encourage young surgeons to get involved in EACTS, as it whole-heartedly supports the future of the speciality (we, the residents) with training, education and connections to the wider world."

knowledge was probably better than ours, but we eventually started chipping away at their lead and they started making mistakes which allowed us to get ahead. Our strength was that we stayed calm and made few, if any, errors. There are questions that we could never answer, and the secret is to let those ones go instead of guessing. The judges are all experts in their fields and were very strict with the answers.

When we won, it was a big surprise because we honestly believed we were the underdogs. The prize was an all-expenses paid trip to the STS conference in Florida, USA, where we played the American Jeopardy champions. Before we went we thought, win or lose, it would be a great experience for us to see how the Americans do things, as well as a chance to visit the Everglades!

We would like to really thank EACTS for this opportunity. Jeopardy encourages learning in a fun and competitive way. The organisation from the staff was first class, and they accommodated our requirements very efficiently: from our invitations all the way to the big day. The Annual Meeting itself was fantastic for residents as it allows for networking, as well as the opportunity to see the latest developments in the speciality. The EACTS Resident's committee also organised a fantastic resident's night out in Vienna city centre (which will be even better next year, we hear!).

We strongly encourage residents to get involved in Jeopardy this year – at least for the banter. We also encourage young surgeons to get involved in EACTS, as it whole-heartedly supports the future of the speciality (we, the residents) with training, education and connections to the wider world.

Would you like to test your mettle in the Jeopardy competition? Details on how to enter will be released later this year. Stay tuned at www.eacts.org, or email info@eacts.co.uk for more information.

The EACTS Clinical Guidelines Committee

New Chair, and latest achievements

The EACTS Guidelines Committee aims to produce and update clinical guidelines and best practice documents for use in clinical practice.

EACTS News spoke to EACTS Guidelines Committee Chair Anders Jeppsson (Sahlgrenska University Hospital, Gothenburg, Sweden), and Committee Member Milan Milojevic (Erasmus Medical Center, Rotterdam, the Netherlands) to find out more about the structure, aims and initiatives of the Committee.

How is the Committee structured?

The Guidelines Committee is composed of 8-10 EACTS members representing the four EACTS Domains: Adult Cardiac, Thoracic, Vascular and Congenital. Members are selected for their recognised expertise and their involvement in EACTS activities. In addition, two members have been selected for their expertise in clinical epidemiology/biostatistics. Right from the outset of the Guidelines Committee, staff support has been assured by Rianne Kalkman, Senior Guidelines Development Manager, EACTS.

How are topics selected?

Topics can be proposed to the Guidelines Committee by any EACTS member or representatives of other societies. However, the final decision to develop a guideline is made by EACTS council after proposal from the domains. To make a guideline more widely accepted, EACTS is always willing to work on guidelines jointly with other societies.

The topic of a Guideline must represent a relevant area of practice of cardiothoracic

surgery, where there is a potential need for guidance in diagnosis or management of a disease or condition, and where a sufficient body of evidence exists. Expert Consensus Papers are selected for topics where the evidence is limited, and the task force members usually suggest treatment strategies based on their collective knowledge and clinical experience.

Taking the initiative is essential for the development of clinical guidelines. EACTS

“The broad implementation of clinical guidelines into daily practice is one of the most important goals of the EACTS Clinical Guidelines Committee for the next three years.”

members need to feel comfortable that they can propose and participate in future projects; they should know that their ideas will be heard and taken seriously by the EACTS Clinical Guidelines Committee.

Can you tell us more about the recent Guidelines on patient blood management for adult cardiac surgery? What's a snapshot of its aims and impact?

Despite intensive research efforts in



Anders Jeppsson

blood conservation and minimising blood transfusion, the number of transfusions in patients undergoing cardiac surgery is increasing. On the other hand, the number of blood donors remains stable or even slightly decreased in Europe. Therefore the minimisation of bleeding and the avoidance of unnecessary blood transfusion is a priority. The 2017 EACTS/EACTA Guidelines on patient blood management for adult cardiac surgery encompasses all aspects of patient evaluation and clinical management surrounding the transfusion decision-making process, including the application of appropriate indications, as well as minimisation of blood loss and optimisation of patient red cell mass. We do believe that these guidelines may help clinicians in daily practice, improve the outcome of patients and decrease the cost of procedures.

Similarly, can you tell us more about the perioperative guidelines?

Stopping and restarting medications in the perioperative period is an essential component of perioperative care. Appropriate medication management helps to maintain the stability of chronic conditions, avoids interactions with anaesthetic agents, and facilitates the transition to the discharge condition. At the same time, several landmark randomised controlled coronary trials have reported the suboptimal use of medication therapies following coronary artery bypass graft (CABG) surgery. The results are quite alarming, and show a significant correlation between suboptimal use of guideline-directed medical therapy and major adverse events during five-year follow-up.

The 2017 EACTS guidelines on perioperative medication in adult cardiac surgery give recommendations on how healthcare

Anders Jeppsson, Chair of the EACTS Clinical Guidelines Committee

What are your thoughts on your new role?

It is an important position to be Chair of the EACTS Clinical Guidelines Committee, and I hope my clinical and scientific experience is the right background for leading the work. International guidelines have today evolved into an important tool to improve local, regional and national treatment protocols. Today it is virtually impossible for an individual surgeon to stay informed in all areas: here the guidelines play an important role.

What you are looking forward to?

Since I have a strong belief that local implication of evidence-based guidelines improves outcome in patients, I am looking forward to working with the international experts, methodologists and the EACTS officials in the committee. Based on proposals from outside and inside the committee, we will identify areas where guidelines or expert statements are missing. Once these areas are identified, we will collect task forces with outstanding members and start the work.



Milan Milojevic

professionals should care for people with specific conditions. The recommendations are based on the best available evidence. Moreover, guidelines also identify areas where additional studies are warranted.

What can we expect from the Clinical Guidelines Committee over the next two years?

The update of the EACTS/ESC guidelines

on myocardial revascularisation will be available in August 2018. In the light of the recently published findings from EXCEL and NOBLE trials, it will be interesting to see if the recommendations for treatment of patients with the left main coronary disease will change.

Also to be published in 2018 are a consensus statement paper on malignant pleural effusion, a joint EACTS-ERS project, and a position paper on the treatment of aortic arch pathology, a joint EACTS-ESVS project.

At this moment there are seven other ongoing guideline projects. Publication of these guidelines can be expected in 2019.

What additional aspects of the Committee would you like to highlight?

For the first time, we have started the production of pocket guidelines for busy clinicians to help in their decision making. These pocket formats condense the most important content from full guideline documents into easily accessible, quick guides. In the near future, we want to have all EACTS guidelines in one place – an application available for download on smartphones and tablet computers. Development of interactive applications should increase guideline adherence and help members to stay up-to-date with the latest guidelines/expert consensus documents.

The EACTS Clinical Guidelines

Committee would like to support national societies with slide presentations, lectures and pocket guidelines. Healthcare professionals are most likely to change their behaviour if they take part in the discussion during the conferences, seminars and other professional meetings. The broad implementation of clinical guidelines into daily practice is one of the most important goals of the EACTS Clinical Guidelines Committee for the next three years.

“... we have started the production of pocket guidelines for busy clinicians to help in their decision making. These pocket formats condense the most important content from full guideline documents into easily accessible, quick guides.”

EACTS brings you the online Training Management System

Evaluation Type	25-08-2017 / 24-08-2018	25-08-2018 / 24-08-2019	25-08-2019 / 24-08-2020	25-08-2020 / 24-08-2021	25-08-2021 / 24-08-2022	25-08-2022
OSATS (4)	+	+	+	+	+	+
SSF (2)	+	+	+	+	+	+
CAT (2)	+	+	+	+	+	+
Annual Evaluation (1)	+	+	+	+	+	+
Feedback Forms (2)	+	+	+	+	+	+
360° Feedback (1)	+	+	+	+	+	+
C-Form (1)	+	+	+	+	+	+

EACTS is constantly developing initiatives to implement our stated aim of “Raising Standards Through Education and Training”. Existing

approaches include the Skills programme delivered through our Academy and MMCTS – the *Multimedia Manual of Cardio-Thoracic Surgery*.

During the last two years we

have worked to develop a tool which will further advance this noble ambition.

We are therefore proud to announce the launch of the Training Management

System, designed especially for residents, trainers and heads of training to monitor progress and evaluation throughout a resident's training programme.

Continued on page 12

EACTS brings you the online Training Management System

Continued from page 11

Training the next generation to become both highly skilled surgeons and the next driving force behind future advancements in cardio-thoracic surgery is a significant undertaking, presenting major challenges for both residents and trainers.

The medical profession has seen critical changes in recent times, and maintaining the highest standards of training can be difficult given shorter working hours and busy schedules. Excellent communication and coordination with trainers and heads of training is key to ensuring strong support systems and steady progression for trainees. This Training Management System will help members with these challenges.

A resident from the Erasmus University Medical Centre in Rotterdam, the Netherlands, gave their perspectives on the Training Management System, noting it is "a very conscious way to track my development, get feedback from my trainers, and finally a tool to achieve comparability on a European level."

The Training Management System is a user-friendly platform enabling residents to submit procedures and evaluation forms to their supervisors for online review and verification. Both residents and trainers have user accounts, with the ability to upload relevant documents, presentations and submit a range of evaluation forms (OSATS, SSF, CAT, 360°), export information, as well as track their progress on an annual basis throughout the entire residency programme. Heads of training can efficiently monitor all their residents' progression through the 'Resident Overview' section in their account.

Since the launch in 2017, hospitals in seven European countries have registered and are actively using the Training Management System. The international nature of

The image displays two screenshots of the EACTS Training Management System. The top screenshot is a 'Questionnaire' form titled 'Feedback Form'. It includes fields for 'Trainer' (Kirsty Offen), 'Date Of Creation' (25/09/2017), 'Date Of Activity' (25/09/2017), 'Training year' (1), and a 'General Remarks' text area. To the right is an 'Upload Files' section with a 'Choose a file to upload' button. Below the form are three rating scales for 'Medical Knowledge', 'Patient Care', and 'Surgical Skills'. Each scale has a slider from 'under level' to 'adequate level' and checkboxes for 'Not Rated' and 'Not Applicable'. The bottom screenshot shows the EACTS dashboard. It features a navigation bar with 'Dashboard', 'My View', 'Documents', and 'User'. The main content area has two cards: 'Resident Requests' showing 'Pending' (2) and 'Assessed' (1) counts, and 'Residents' showing a 'Count of Residents' (3). A 'Notifications' section at the bottom lists recent activities, such as 'Requested you to be his/her head of training' and 'Feedback for procedure SSF with reference: 00030031 has been viewed'.

this platform is a significant development towards the harmonisation of resident training, facilitating a uniform platform to assess training for all countries. The system also introduces Entrustable Professional Activities as a framework for the assessment of residents, ensuring performance is measured by quality, not quantity, in a resident's training portfolio.

The Training Management System is offered free for EACTS members; heads of training are required to be EACTS members and residents are encouraged to apply for membership. Go to www.eacts.org/the-association/membership/ to discover more benefits of being an EACTS member.

Feedback from current users is extremely positive, with the benefits exceeding all

expectations. Registration is easy, and information is confidential. The next stage of development is to create the Training Management System App.

To register your centre to the Training Management System, go to www.eacts.org/educational-events/training-management-system/ where you can also request a demonstration via the virtual tours.

EACTS – PACT Joint Symposium:

Regenerative Medicine: Taking the Science to the Patient

30 November – 1 December, 2017, Vienna, Austria

H Jan Ankersmit, Ralph Schmid, Thomas Marti and Michael Comer on behalf of EACTS and PACT Austria

The ultimate aim of scientific work in the field of regenerative medicine is to develop devices or novel cell-based drug products that will serve disease-ridden patients. For this reason, the organising committee of EACTS and the Austrian Platform of Cellular Therapies (PACT Austria) joined forces to organise a meeting that brought together basic scientists, clinicians, regulatory affairs, service providers and esteemed thought leaders to discuss outlooks and progress in regenerative medicine.

In short, the field has moved on, and the “cell-centric vision” in regenerative medicine is under heavy discussion, especially after cell-based therapies in myocardial infarction have not lived up to the high-flying expectations induced by preclinical research. “Safe but a futile therapy” is the currently accepted assessment by pundits based on monitored clinical trials in humans.

However, novel scientific developments can be seen on the horizon. Multiple presentations advocated secretory products derived from cells – either mesenchymal stem cells (MSC) or peripheral blood mononuclear cells (PBMNCs) – for their regenerative or cytoprotective capabilities (e.g.

lipids, exosomes, or proteins). A final verdict on this novel development cannot be drawn at this moment. The field is moving towards clinical trials within the next two years.

A second highlight of this meeting was the prominent speaker list that represented regulatory service providers, toxicologists and a prominent member of the Austrian Regulatory Affairs (AGES). This approach was chosen by the organisers since the often advocated mantra “Taking the Science to the Patient” can only be materialised when a heavy interaction between regulatory affairs, researchers and stakeholders is taking place. This scientific gathering was thought-up to augment and

exchange knowledge between high-flying research and those health agencies that finally approve novel medical devices and drug therapies to society.

A third highlight was the basic research presentations that dealt with inflammation in the heart after AMI, myocarditis, shock wave therapy and atherosclerosis.

In conclusion, this meeting became possible due to the positive interaction between EACTS and PACT Austria. The supporting team, namely Dr Christine Prenner, Dr Iris Ribitsch and Dr Beatrix Reinprecht have made this educational meeting an exciting experience. All-told, 140 scholars and 40 delegates have made this meeting a success. For this we thank all of you.



Learn with us. Publish with us.

- Authored by international experts
- Step-by-step surgical video for every procedure
- Clear, concise text
- Award-winning website design
- PubMed indexed



MITACS (Minimally Invasive Techniques in Adult Cardiac Surgery) 2018



Peyman Sardari Nia



Volkmar Falk



Thomas Walther

Peyman Sardari Nia

Maastricht University Medical Center,
the Netherlands

Medical speciality is evolving very rapidly with the development of new techniques and treatments. The correct implementation of new procedures is crucial for the progress of our speciality, and for the training of future surgeons.

EACTS recognises the need for structural educational activities in minimally invasive techniques. The MITACS course was founded in 2011 to address this, and has subsequently become one of the most popular courses in the EACTS Academy calendar. The focus of the MITACS course is on the technical aspects of different minimally invasive procedures, and it is designed to provide participants with a platform and insight into all of the latest minimally-invasive procedures available.

The course is held over three days, and is composed of different parts, each dedicated to specific subjects. To emphasise the success of the teamwork approach, surgeons, cardiologists, perfusionists and anaesthesiologists will contribute to the programme through presentations, live-in-a-box video cases and live surgeries (in 2D and 3D) in order to demonstrate the technical aspects of these new procedures.

During the 2018 edition, we will stimulate the direct input of our colleagues, and will have – at the end of each day – a meet-the-expert session. Participants will be encouraged to present their case reports highlighting difficult decision-making in

minimally invasive procedures. These can be submitted through the EACTS website and after peer review, the selected cases will be presented during the programme.

We will also feature “SimCity” during the

three-day MITACS programme – a simulated exhibition village showcasing the various platforms currently available for minimally invasive procedures in cardiac surgery. This will inform participants regarding the possible training modalities to enable them to start a minimally invasive programme.

MITACS 2018 **26-28 June 2018**

Organiser: EACTS

Course directors:

Peyman Sardari Nia,
Maastricht, the Netherlands
Volkmar Falk,
Berlin, Germany
Thomas Walther,
Frankfurt, Germany

Venue: MECC, Maastricht,
the Netherlands

Target audience:

Cardiothoracic surgeons;
Cardiologists; Cardiac
Anaesthesiologists;
Perfusionists; Residents
and fellows

Course Venue

Situated between the rolling hills of the wonderful countryside, Maastricht lies at the heart of a EU-region of four-million people who live in three countries, and speak four languages. The energy that this generates has resulted in a city that bursts with creativity, researchers and innovators.

The course will be held at MECC (Maastrichts Expositie en Congres Centrum), within walking distance of Maastricht University Medical Center (MUMC) from which over 10 live cases will be transmitted in 2D and 3D.

The 2018 MITACS course will run from 26-28 June 2018. Registration can be completed online and through your EACTS user area.

.....
For further information please visit the EACTS website at <http://eacts.org/educational-events/programme/mitacs-2018/>
.....

A report from last year's MITACS meeting can be downloaded from the website here:
<http://www.eacts.org/wp-content/uploads/2017/09/EACTS-MITACS-2017-Course-Report.pdf>



EACTS
European Association For Cardio-Thoracic Surgery

Academy Training

Aorta Transcatheter Aortic Valve Replacement
Congenital Coronary revascularisation
Oncology Arterial Grafting techniques
ECMO Surgical Pectus
Aortic Cardiac Surgery Vascular
Thoracic Cardio-Thoracic Valve Surgery

2018
COURSES

Specialist Courses:

Endoscopic Port-Access Mitral Valve Repair Drylab Training	3-4 May, Maastricht, The Netherlands
Video-Assisted Thoracoscopic Surgery (VATS)	17-18 May, Berlin, Germany
Aortic Valve Repair Summit	18-19 June, Paris, France
Minimally Invasive Techniques in Adult Cardiac Surgery (MITACS)	26-28 June, Maastricht, The Netherlands
Endoscopic Port-Access Mitral Valve Repair Drylab Training	6-7 September, Maastricht, The Netherlands
13th European Mechanical Circulatory Support Summit (EUMS)	1-3 November, Berlin, Germany
Professional Leadership Workshop	26-27 November
Endoscopic Port-Access Mitral Valve Repair Drylab Training	13-14 December, Maastricht, The Netherlands

Fundamental Courses, EACTS House, Windsor, UK

Thoracic Surgery: Part I	12-14 April
Fundamentals in Cardiac Surgery: Part II	4-8 June
Thoracic Surgery: Part II	14-16 June
Thoracic Surgery: Part III	20-22 September
Fundamentals in Cardiac Surgery: Part III	1-5 October
Congenital Heart Disease	13-16 November

Raising Standards Through Education and Training

www.eacts.org

EACTS Academy Course: 'Fundamentals in Cardiac Surgery'

Steve Livesey

University Hospital Southampton, UK

I took over from Professor John Pepper as Director of the 'Fundamentals in Cardiac Surgery' courses in October 2017. I am extremely grateful to John for the hard work and vision he showed in developing the courses.

The courses are designed to cover all the basic aspects of cardiac surgery that a trainee would expect to be familiar with. They are held over three separate weeks, with Fundamentals I having been held in February, II planned for June and III in October.

This year, 'Fundamentals I' covered coronary artery disease, aortic valve surgery as well as cardiopulmonary bypass, post-operative management and essential cardiac imaging. 'Fundamentals II' will cover diseases of the aorta, congenital heart disease and the surgical treatment of the failing heart and lungs. 'Fundamentals III' is being held at the end of October and will cover mitral and tricuspid surgery, atrial fibrillation, endocarditis, carcinoid heart disease, pulmonary embolism and HOCM.

The courses are held at EACTS House in Windsor, UK. Windsor is easily accessible from the London airports and itself is a town of great historical interest. EACTS House has a dedicated teaching room where the course is held; each course has a day dedicated to wet-lab work which has proved to be extremely popular.

The Faculty is comprised of enthusiastic teachers from across Europe and North America who have shown a real ability and commitment to the training of the next generation of surgeons.

The course as a whole is designed to be aligned with the syllabus of the European Board of Cardiothoracic Surgery (available at <https://www.ebcts.org/syllabus/>).

The dates for the remaining 2018 courses are as follows:

■ Fundamentals II: 4-8 June 2018

■ Fundamentals III: 1-5 October 2018

It is possible to do each course as a freestanding module over more than one year, though ideally it is preferable to attend all three courses in the same year as the format may change slightly from year to year.

There are places for approximately 40 delegates on each course. They have proved extremely popular and do fill up quickly.

.....
More information about the courses can be found on the EACTS website at
<http://www.eacts.org/educational-events/academy/>



EACTS Aortic Valve Repair Summit



18-19 June, 2018



Paris, France

Course Information

Course Format

Live surgical cases, presentations led by keynote international faculty, scientific debate, dynamic research, video and abstract presentations.

Course Overview

Bringing together the different schools in aortic valve repair, the Summit will cover all aspects of the disease including medical therapy, imaging, patient selection and surgical techniques focused on patient outcomes. The aim is to integrate state-of-the-art into daily practice and to challenge current knowledge through high-level scientific debates on the main topics of aortic valve repair. The programme will also provide an in-depth overview of aortic valve repair from valve-sparing root replacement to isolated aortic valve repair for tricuspid, bicuspid and unicuspid valves.

Target Audience

Cardiac surgeons, echocardiographers (cardiologists and anaesthesiologists), radiologists and advanced residents interested in the field of valve repair who are encouraged to present their scientific work in abstract presentations.

Learning Objectives

To showcase the latest techniques in aortic valve repair, participate in conversation, share experiences and help raise better medical evidence to clarify the place of repair versus replacement in aortic valve surgery.

Organising Committee

E Lansac, Paris – local Chairman

J Bavaria, Philadelphia; A Berrebi, Paris; M Boodhwani, Ottawa; L De Kerchove, Brussels;

R De Paulis, Rome; I Di Cerna, Suresnes; Y D'Udekem, Melbourne; I El-Hamamsy, Montréal;

G El Khoury, Brussels; H J Schäfers, Homburg Saar; JIM Takkenberg, Rotterdam;

J Vanoverschelde, Brussels.

Abstracts

The submission deadline for abstracts is 2 April 2018.

Course Fees

Members €550 inclusive of VAT

Non-Member €650 inclusive of VAT

**This course is
Eucomed compliant**

Course Programme

Day 1 - Monday 18 June

08:00	Opening remarks	
	Live case 1: aortic root aneurysm tricuspid valve	E Lansac, Paris
	Heart team selection of patients for aortic valve repair: a key for a successful repair	A Berrebi, Paris
	Aortic annuloplasty: anatomical landmarks and surgical option	L De Kerchove, Brussels
	Geometric height (gh) and effective height (eh): key parameters for aortic valve repair	H J Schäfers, Homburg Saar
10:30	Break	
11:00	Aortic root and ascending aorta aneurysms debate: how to tailor the indications to patient's risk; place of medical therapy	J Eleftheriades, New Haven; G Jondreau, Paris
	Live-in-a-box from different schools	
	Abstract/video/case reports selected	
	Valve sparing root replacement debate: reimplantation or remodeling with aortic annuloplasty	E Lansac, Paris; G El Khoury, Brussels
13:00	Lunch	
14:00	Live case 2: aortic root aneurysm bicuspid valve	G El Khoury, Brussels
	Bicuspid aortopathy: when to replace the aorta	M Berger, Leipzig
	Conduction system: anatomical differences between tricuspid and bicuspid valve	G Thiene, Padova
	Bicuspid valve repair debate: symmetrical or asymmetrical repair to ensure long term stability	J Bavaria, Philadelphia; H J Schäfers, Homburg Saar
	Live-in-a-box from different schools	
16:00	Break	
16:30	Abstract/video/case reports selected	
	Valve sparing versus mechanical Bentall versus bio Bentall: what is the level of evidence?	R De Paulis, Rome
	Aortic dissection: when to spare the valve and how do it safely	E Chen, Atlanta
18:30	Close	
19:00	Optional group dinner and river cruise	

Day 2 - Tuesday 19 June

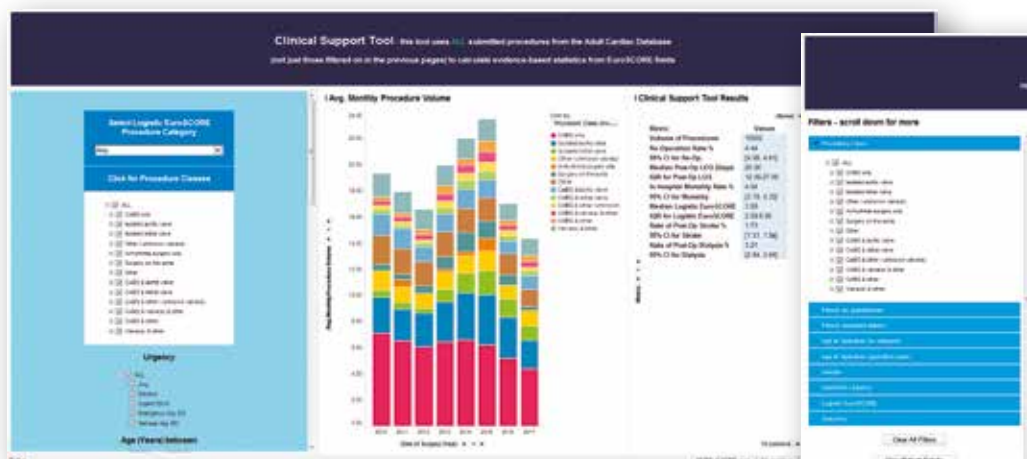
08:00	Opening remarks	
	Live case 3: isolated aortic valve repair (tricuspid or bicuspid valve)	E Lansac, Paris
	Asymptomatic aortic insufficiency debate: are guidelines for surgery ok or should we operate earlier?	J L Vanoverschelde, Brussels; M Desai, Cleveland
	From simple to complex cusp repairs: tips and tricks	M Boodhwani, Ottawa
	Minimally invasive aortic valve repair: a safe approach?	M Shrestha, Hannover
	Live-in-a-box from different schools	
10:30	Break	
11:00	Abstract/video/case reports selected	
	Post-repair evaluation of the aortic valve: when to re-clamp or not re-clamp	J L Monin, Paris
	Clinical cases of intraoperative failure	Faculty
	Isolated aortic valve repair rapid fire debate:	
	- Valve sparing root replacement	G El Khoury, Brussels
	- Suture annuloplasty	H J Schäfers, Homburg Saar
	- Internal ring	J S Rankin, Morgantown
	- Double external annuloplasty	E Lansac, Paris
13:00	Lunch	
14:00	Live case 4: bicuspid or unicuspid repair	H J Schäfers, Homburg Saar
	Paediatric aortic valve repair	Y D'Udekem, Melbourne
	Ascending aorta aneurysm in paediatric population and adult congenital: when to operate and how far to resect	D Cameron, Boston
	Live-in-a-box from different schools	
16:00	Break	
16:30	Abstract/video/case reports selected	
	Alternatives to aortic valve repair:	
	- What to do if the valve cannot be repaired	I El-Hamamsy, Montréal
	- How to help the patient to choose the right option	JIM Takkenberg, Rotterdam
	Importance of evaluation in adults and paediatric populations: AVATOR registry	J Kün, Amsterdam
18:00	Close	

EACTS Quality Improvement Programme

The Quality Improvement Programme (QUIP) was launched in 2012 by EACTS to improve clinical outcomes for patients. Since its inception, two databases and a benchmarking tool operate on an international scale, providing data to help identify areas of improvement for patient clinical outcomes, enhance statistical analysis and research opportunities.

The EACTS Quality Improvement Programme's Database Task Force is made up of six clinical members to further develop all aspects of the Programme's quality improvement initiatives. The task force presented their research and advancements in adult cardiac surgical data and discussed quality outcomes for patients in the EACTS Quality Improvement Programme's Focus Session at the 31st EACTS Annual Meeting in 2017. You can access the EACTS Annual Meeting Media Library (<http://medialibrary.eacts.cyim.com/>) to view their presentations.

EACTS welcomes Dr Örjan Friberg, from the Örebro University Hospital in Sweden,



Clinical Support Tool (with procedure class dropdown)

who has been appointed as the new Quality Improvement Programme's Database Task Force Chair.

EACTS Adult Cardiac Database (ACD)

Cardiac units and national registries from 17 European countries have been contributing surgical data to the EACTS Adult Cardiac

Database for the purpose of developing a benchmarking library where they are able to compare outcomes of like for like cases. Surgeons from contributing units can access anonymous data of surgical procedures and compare their hospital's data with all other hospitals in the database. The growing number of centres and countries participating demonstrates the increasing necessity to benchmark hospital data on an international scale.

National Registries in Europe have been collaborating with the EACTS Quality Improvement Programme to send national adult cardiac data to the ACD.

Belgium – the Belgian Association of Cardio-Thoracic Surgery (BACTS)

Czech Republic – the Institute of Health Information and Statistics

France – a national registry, EPICARD, led by the French Society of Thoracic and Cardiovascular Surgery

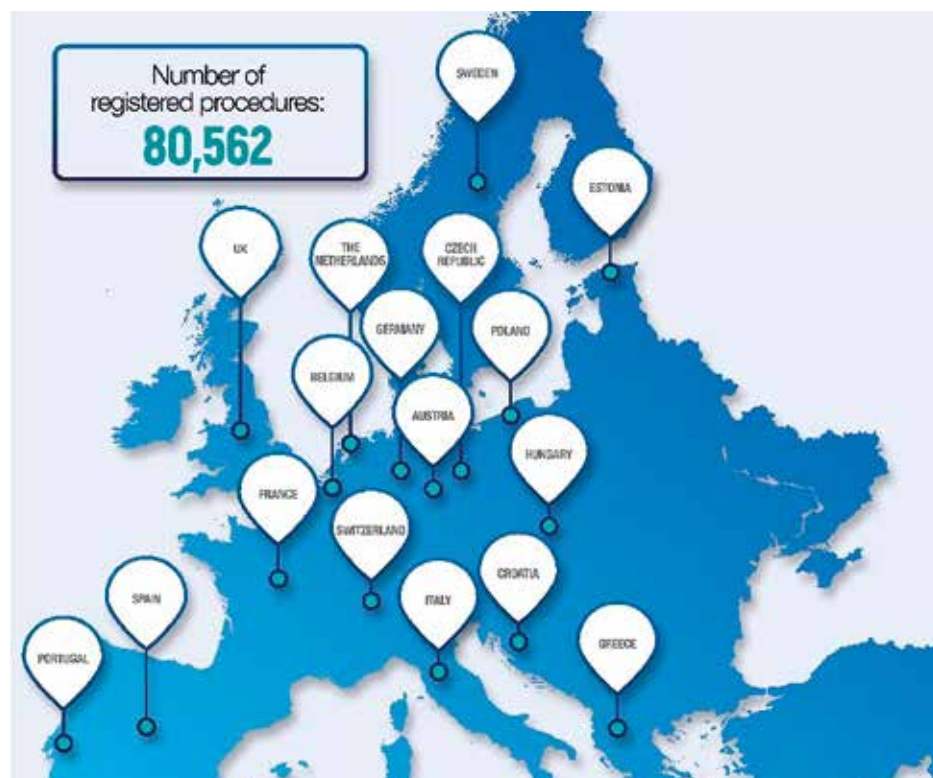
Netherlands – National Registry BHN

Spain – the Spanish Society of Cardio-Thoracic and Vascular Surgery (SECTCV)

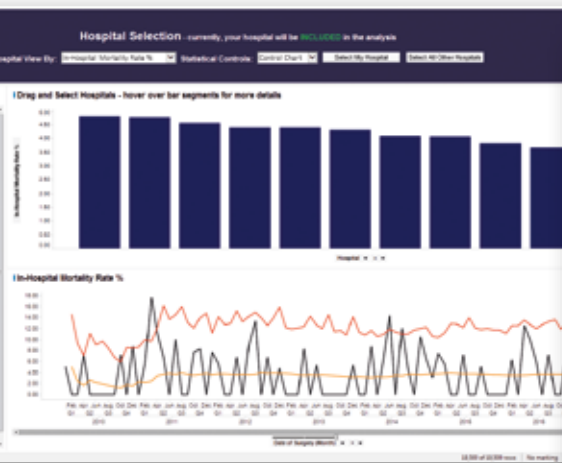
Sweden – Swedeheart

Switzerland – Nationales Herzchirurgie-Register

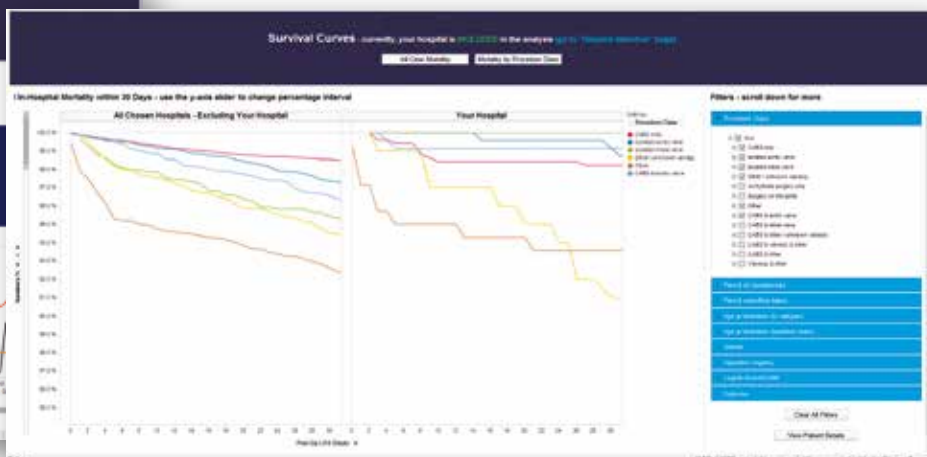
Figure 1: Map of countries contributing to the EACTS Adult Cardiac Database. With already over 80,000 procedures in the database from 74 registered centres across 17 countries since 2015, the Adult Cardiac Database is becoming a key tool in European benchmarking of adult cardiac data.



Örjan Friberg, Database Chairman



Hospital Selection (with mortality control chart)



Survival Curves (mortality by procedure class)

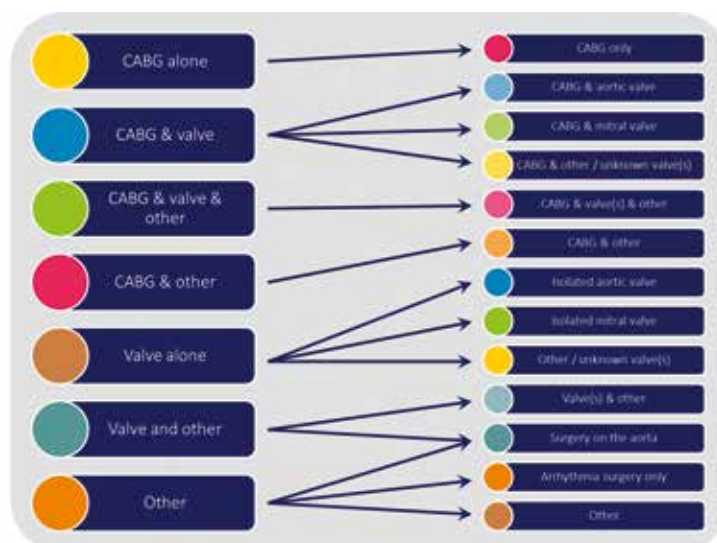
New advanced features on the tool

In 2017, advanced benchmarking features had been added to the tool to improve the user's experience with the data. When you log in to the Adult Cardiac Database*, you will be able to compare your hospital's data and use these new features:

- The new Hospital Selection Page includes more metrics for hospital comparison, additional statistical controls (mean \pm 1SD, 95% CIs and IQRs) and detailed filters enabling you to focus on different sub categories.
- You can also compare your hospital with other anonymous hospitals in the database via the survival curves comparing individual procedures or all cases, filtered by period, age at operation, gender, operation urgency, logistic EuroSCORE and outcome.
- One of the most widely used features of the database includes the clinical support tool page, which has been updated with the advanced filters. Through this page you can find representative outcome statistics on patients with comorbidities for the type of procedure they will be undergoing.

Bespoke reports and data validation

EACTS is convinced that better data quality and benchmarking can lead to better outcomes in cardiac surgery, thus has implemented more rigorous processes to ensure high quality data. To help improve data quality and outcomes, EACTS conducted a survey in 2017 with



Simplified infographic showing breakdown of procedures available in the tool. Further detailed filters are also available on the hospital selection page

participating hospitals to assess current practices in data validation. Based on these results, the QUIP team is able to provide bespoke data validation reports for individual centres. EACTS also generates individual reports for each contributing hospital with the data used from the Adult Cardiac Database, which provides statistical support for scientific research.

"In order for the Adult Cardiac Database to be useful for benchmarking and for clinical support, the reliability of the data should be of a high level," commented Dr Friberg. "Importing non-validated data compromises data quality. Rather than expanding to many centres as quickly as possible, we want to concentrate on importing data from hospital sources that have been validated one way or another.

"Validation can be conducted on a hospital level, on a national level, by statistical

methods or by audits, and preferably by several means. Merging data from a number of different local databases and several national registries also requires thorough considerations in terms of valid data in relation to potentially differing data definitions. The task force aims to publish recommendations for data validation shortly."

Adult Cardiac Database benchmarking outputs

As an effective benchmarking tool, hospitals are able to apply data to statistical reports using outcomes

from the Adult Cardiac Database and use the data to identify areas of improvement. As a participant in the EACTS Quality Improvement Programme, the Adult Cardiac Surgery Department of Hospital Universitario La Paz (www.cirurgiacardiacalapaz.com) has published their results from the Adult Cardiac Database, which convey indicators of activity, effectiveness and performance. The Adult Cardiac Surgery Department of Hospital Universitario La Paz has developed a Total Quality Plan based on a redesign of processes oriented towards the patient, and through their participation in initiatives such as the EACTS Quality Improvement Programme, has demonstrated dedication to their goal of improving clinical outcomes for patients.

Go to www.eacts.org/quip/adultcardiacdatabase or contact quip@eacts.co.uk to find out more.

* To access the Adult Cardiac Database and the Benchmarking Tool your centre must be a contributor to the database.



Theo de By

EUROMACS Managing Director,
EACTS, Windsor, UK

Continuous growth and increasing quality of the Database

EUROMACS, the European Registry for Patients with Mechanical Circulatory Support, has continued to grow as a registry and pool of scientific research in the field of mechanical circulatory support. The participating hospitals have now contributed data of more than 3,700 implantations (including 212 in children) of long-term assist devices and >17,000 follow-up records.

Feedback with respect to data quality was provided to the participants by means of statistical analysis and several on-site audits. By continuous communication with the data managers and responsible staff of the implant centres, the quality of the submitted data could be substantially improved.

New Committee Chairman and Vice Chairman

The EUROMACS Committee rotary scheme functions so that Committee membership lasts for three years, and can be extended with a second period of three years. Following this scheme, Professor Jan Gummert and Professor Paul Mohacsi stepped down as Chairman and Vice Chairman at the end of 2017. In their last meeting, the Committee members expressed their gratitude for all the contributions both gentlemen have provided to EUROMACS since its inception in 2009.

Since 1 January 2018, Professor Bart Meyns has taken over as Chairman, and Dr Felix Schönrath as Vice Chairman. Professor Meyns is Chief of Cardiac Surgery at the University Hospitals Leuven, Belgium. He received a PhD in 1997 with his thesis, "Ventricular Support with Miniature Rotary Blood Pumps" – one of his primary interests amongst the clinical applications of mechanical support systems and congenital heart surgery.

Dr Schönrath is Senior Consultant of the Department of Cardiothoracic and Vascular Surgery of the Deutsches Herzzentrum Berlin, Germany. He began his training in medicine in 2004 in Berlin and undertook internships and fellowships in both Berlin and at the University Hospital of Zurich. He is board certified in internal medicine,

emergency medicine and cardiology. His main research interests are in advanced therapies in end-stage heart failure, and anticoagulation management in cardiac surgery.

New EUROMACS Committee Members

Since Professors Gummert and Mohacsi stepped down, the Committee, with support of the EUROMACS members, found Professor Steven Tsui and Professor Daniel Zimpfer willing to fulfil the vacancies.

Professor Tsui is Chairman of the Cardiothoracic Advisory Group at NHS Blood & Transplant (NHSBT), UK and Chairman of the Specialty Training Committee for Cardiothoracic Surgery in Health Education East of England. His clinical interests focus on surgical device therapies for end-stage heart and lung failure including extra-corporeal membrane oxygenation (ECMO), ventricular assist devices (VAD), and total artificial hearts (TAH).

Professor Zimpfer is the Director of Mechanical Circulatory Support at the Department of Cardiac Surgery and Director of Pediatric Cardiac Surgery, Medical University Vienna, Austria. His main areas of research are mechanical circulatory support in adult and paediatric patients, coronary revascularisation and treatment of hypoplastic left heart complex as well as aortic arch pathologies. Furthermore, he was involved in the preclinical and clinical testing of multiple rotary blood pumps.

Scientific research projects: how to request for EUROMACS data

Increasingly, researchers have approached the EUROMACS Committee with requests to obtain data for research purposes. In 2017, 12 such requests were received, 10 of which were granted. Three studies initiated in 2016 have been ongoing.

To request data for research purposes, participating centres can submit a designated form and a short description of the research project to the Managing Director. The Study Proposal Evaluation Sub-Committee, consisting of five academic members of the EUROMACS Committee, will subsequently evaluate the research project, respecting the confidentiality of the proposal and its investigators. The Sub-Committee will ascertain that there is no conflict of interest

with other studies and prioritise the subject for its contribution to the scientific insights concerning mechanical circulatory support. Providing the proposal has been accepted then a research agreement is signed by both parties to consolidate that data provided are to be used exclusively for the purpose stated in the research proposal.

Additionally, the EUROMACS Committee applies a timeframe for the completion of the research study, requesting that the researchers work on the project at such a pace that a clear beginning of the study can be shown after six months. At 12 months, the study should be in a phase of completion. If after 18 months the study is not close to completion, the EACTS would be able to withdraw the rights to use and publish the data.

To see the list of scientific publications with data from EUROMACS please see the EUROMACS website at www.euromacs.org/downloads/scientific-articles.

Increasing the research possibilities

Following the increasing need to use the EUROMACS Registry as a source for clinical studies, the Committee has decided to re-develop the database with REDCap software. The advantage of REDCap is that, apart from the standard data, additional data fields can be programmed which can exclusively be seen by the study participants. In this way, prospective studies can be executed without "hindering" the regular data submission activities.

In addition to this, REDCap recognises each participant data manager and adapts questions to the specific characteristics of the hospital he or she represents. As compared to the present situation in which the EUROMACS generates "manual" follow-up requests for each centre at a time, the possibility of REDCap to automatically send follow-up alerts will add to the efficiency of the process.

In the months to come, the members of EUROMACS and the hospitals that contribute data will be kept up to date with the development and the availability of REDCap.

.....
To find out more about EUROMACS, please visit www.eacts.org/quip/euromacs/.

The STS/EACTS Latin America Cardiovascular Surgery Conference

Jose L Pomar

University of Barcelona, Spain

Following several conversations at some of the annual meetings in the US and Europe in recent years, the idea was born to establish a cooperative effort between the most relevant CTS Societies – one which could be used to initiate a programme that would help rapidly developing areas of the world implement their own scientific societies in the cardiovascular and thoracic fields.

The International Leadership working group, during a Society of Thoracic Surgeons (STS) Annual Meeting, approved a plan to do what was later called the STS/EACTS/Latin America Cardiovascular Surgery Conference, held in September of 2017. Our past Secretary General, A. Pieter Kappetein, on behalf of the EACTS, accepted to be part of this unique event. The initial plan would be a logistical organisation run by the STS Office Headquarters in a direct liaison with Latin America representatives lead by Dr Juan Pablo Umaña, one of the most



prestigious heart surgeons of Bogota. EACTS was committed to the incorporation of key speakers, but without getting involved in any financial issues (both profit or losses). STS offered to hold the challenge.

The venue, after several

options were explored, was decided to be the Hilton Resort in the beautiful colonial city of Cartagena de Indias, Colombia. The lecture hall and the space for industrial exhibits fulfilled the required expectations, as well as the cost of the rooms

and working areas – within a reasonable margin.

The scientific programme was also constructed in a very collaborative way, from the three parts, and included most of the domains of our specialty.

Four CTS surgeons

Conclusions from the meeting:

- Most attendees expressed to the organisers and faculty members their satisfaction for such an initiative. The format was very good, although some more time for discussion was also a plea. In fact, they were very excited as it was probably the first big international meeting in this side of the world where the allocated time for sessions and lectures was strictly followed, keeping the programme schedule on time for the whole conference.
- It was clear also for all the members attending the debriefing that next time the collaboration should be strengthened. In this sense, EACTS proposed a more balanced financial responsibility, offering to run it at a 50/50 share with the STS. The number of representatives will also be chosen according to the impact on distance and time, which also indirectly influence the overall economics.
- As Cartagena in Colombia was very convenient, and the venue, the Hilton, excellent – and together with the need for firm setting of future cooperation – we all agreed to hold the 2018 conference in the same city and venue. However, we were open for subsequent years to be held in other cities and countries, such as Mexico, Argentina, Brazil and Ecuador. Indeed, some other Latin American societies offered to help in future.
- Also, two issues were relevant to mention: One was to keep in line with the character of the conference, in terms of planning the next scientific programme; and, as important or even more, to help the US and Europe to consolidate a database to allow, in a proper way, the analysis of surgical activity and outcomes. This was deemed as critical assistance that could be offered to this large community of cardiovascular surgeons, and was indeed one of their most repetitive demands.
- Implementation of more interaction between the STS headquarters and the EACTS Head Office in Windsor, UK – both already individually excellent at the highest level – was also classed as important in order to ensure the most adequate planning and development of the next conference.

.....
For more details of the STS/EACTS Latin America Cardiovascular Surgery Conference, including the 2017 programme, head to: www.cardiovascularsurgeryconference.org

The STS/EACTS Latin America Cardiovascular Surgery Conference

Continued from page 21

coordinated the meeting: Joe Bavaria and Vinod Thourani for the STS, Juan P Umaña for the Latin-American surgeons and myself, Jose L Pomar, for EACTS, as Chairman of the International Cooperation Committee.

The Faculty was large, and incorporated many surgeons from the US, Latin America and Europe. From EACTS, Manuel Antunes from Portugal, Enrico Ferrari from Switzerland, Gebrine El Khouri from Brussels, and Ruggiero De Paulis from Italy were among other European surgeons participating in this conference.

The targeted audience was, on one hand, the leadership of the units in Latin America including

Mexico, Central America, all Spanish speaking countries and Brazil. On the other hand, a wide representation of the younger generation was invited in order to have a real approach to the situation in terms of the requirements for a further reorganisation of a wider scientific society of this crucial part of the world.

Fabio Jatene from Sao Paolo was the special guest speaker and gave an outstanding lecture summarising the most relevant achievements developed by our Latin American colleagues in the cardiovascular field, covering real landmarks in medicine.

More than 300 attendees enjoyed the conference, and were able to join in discussions with the presenters during and in



(From right) Jose Pomar and fellow meeting organisers Vinod Thourani, Juan P Umaña and Joseph Bavaria

between the scientific sessions.

The social events were carefully prepared by our American colleagues and were very important in facilitating increased communication with other colleagues, in turn helping to better understand the outcomes of such a conference.

Surgeons, industry and staff were more than happy to reach the goals of this meeting, and some of the key organisers had a debriefing where, unanimously, it was decided after the success of the conference, another edition in 2018 should be organised.

EACTS Award Winners 2017

Techno College Award

R. Gottardi (Paracelsus Medical University, Landeskrankenhaus Salzburg, Austria)

EACTS Young Investigator Award

– Cardiac:

C. Bening (University Hospital, Wuerzburg, Germany)

EACTS Young Investigator Award

– Thoracic:

P. Beckers (University Hospital, Antwerp, Belgium)

EACTS-STS Young Investigator Award:

W. Heo (Gangnam Severance Hospital, Seoul, South Korea)

Hans Borst Award:

T. Krüger (University Medical Center, Tübingen, Germany)

T. Plonek (Wrocław Medical University, Wrocław, Poland)

EACTS-LivaNova Cardiac Surgery

Innovation Award:

C. Kraph (Medical University, Innsbruck, Austria)

EACTS-AATS Excellence Award:

F. Pitoulis (Hammersmith Hospital, London, UK)

EACTS Jeopardy Award:

J. Lodhia and P. Ariyaratnam (Castle Hill, Hull, UK)



Video-Assisted Thoracoscopic Surgery (VATS) Course

Pala B Rajesh

Council Member, EACTS, Birmingham, UK

This advanced course is aimed at senior trainees and newly appointed independent surgeons who have had previous experience in video assisted techniques in the speciality of thoracic surgery.

The aim of the course is to inform and introduce various approaches to VATS lobectomy. Delegates will be exposed to products currently available on the market, and industry will demonstrate their latest products. Furthermore, innovations in the speciality will be discussed with the faculty and the delegates by the representatives of our industry partners.

The course aims to:

1. Demonstrate the various approaches to VATS lobectomy
2. Discuss the operative technique
3. Recommend appropriate stapling devices to the various structures encountered during the procedure
4. Discuss operative complications and how to prevent them from occurring
5. Demonstrate human factors and non-operative skills in the operating room
6. Troubleshoot with the faculty

The programme this year features an international faculty with a variety of skills which are state of the art. The delegate should be in a position to return home after the course satisfied that he or she has had all of their questions answered. The faculty will be available throughout the duration of the course for informal discussion. Faculty and delegates will be accommodated in the same hotel to facilitate this.

The number of candidates accepted on to the course will be restricted to 12, as this is the optimum number to achieve its aims and objectives.

Further information can be found at: <http://www.eacts.org/educational-events/programme/vats-2018/>

Video-Assisted Thoracoscopic Surgery (VATS) Programme

17-18 May 2018

Berlin, Germany

THURSDAY 17 MAY

07:30	Registration and welcome
08:00	Video-Assisted Thoracoscopic Surgery (VATS) – The evidence – Principles Patient selection
09:30	Break
10:00	VATS lobectomy live-in-a-box videos step-by-step with pitfalls VATS right upper lobectomy VATS middle and right lower lobectomy VATS left upper lobectomy VATS left lower lobectomy
12:00	Lunch
13:00	Drylab – Drylab introduction – VATS staplers and energy I – VATS lobectomy (left lower lobectomy) – VATS lobectomy (left upper lobectomy)
15:30	Break
16:00	VATS lobectomy live-in-a-box videos Complications management
17:00	Close

FRIDAY 18 MAY

08:00	Animal ethics and anaesthesia Bronchoscopy double lumen intubation with pitfalls VATS staplers and energy II
09:30	Break
10:00	Wetlab – Introduction – Bronco-mediastinoscopy – VATS lobectomy (left lower lobectomy) – VATS lobectomy (left upper lobectomy)
13:00	Lunch
14:00	VATS lobectomy live-in-a-box videos Complications management
15:30	Feedback
16:00	Close



EACTS News

Editor-in-Chief

Peter Stevenson

Managing Editor

Rianne Kalkman

Marketing and Communications Manager

Ritu Arora Johnson

Editor

Rysia Burmicz

Design

Peter Williams

Publishing and Production

MediFore Limited

Tel: +44 (0) 208 771 8046

mary.kennedy@medifore.co.uk

Copyright

Copyright © 2018: European Association for Cardio-Thoracic Surgery. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, transmitted in any form or by any other means, electronic, mechanical, photocopying, recording or otherwise without prior permission in writing from the EACTS or its associated parties. The content of EACTS News does not necessarily reflect the opinion of the EACTS, its Chairs, Scientific Advisors or Collaborators.

32nd EACTS Annual Meeting Milan, Italy

18-20 October 2018

Deadline for Abstracts - 30 April 2018

To find out more or to register for the event visit:

www.eacts.org



EACTS
European Association For Cardio-Thoracic Surgery

Thursday 18th	Friday 19th	Saturday 20th
Techno-College	Techno-College	Techno-College
Professional Challenge Sessions	Professional Challenge Sessions	Professional Challenge Sessions
Focus Sessions	Focus Sessions	Focus Sessions
Abstract Sessions	Abstract Sessions	Abstract Sessions
Hands-on Training	Hands-on Training	Hands-on Training
Exhibition		
Early registration deadline: 1st July		
Official housing agency: MICO DMC		

Raising Standards Through Education and Training