



In this issue

3 A look ahead to the Acquired Cardiac Disease Domain



4 This year's Congenital Domain calendar

5 The 2019 Thoracic programme

6 News from the Vascular Domain

6 The Endoscopic Port-Access Mitral Valve Repair Drylab Training course

9 VATS lobectomy course: a look back

10 STS/EACTS Latin America Cardiovascular Surgery Conference

12 Francis Fontan Fund Fellowship offers advanced training

13 Residents sessions in Lisbon

14 Welcoming three new members to the Residents Committee

15 'My first year' in the Residents Committee



I'm here to invite you to the 33rd Annual Meeting!

It has been a very busy year for EACTS, establishing change and mapping out our future. In preparing for this year's Annual Meeting, it is clear that the programme committees, the task forces, the staff and all of our consultants have done a great job.

The Annual Meeting takes place in Lisbon on 3–5 October – the second time in its new three-day format. We have a range of attractive sessions across the three days, including a number of popular sessions on the final day. So, please book your return flight on Sunday, not Saturday! I can hear you asking, why exactly should I stay? Read on to find out ...

At the Annual Meeting, we offer education along three main tracks: (1) New Technology; (2) Focus Sessions and Professional Challenges; and (3) Clinical Evidence.

New Technology

While we have sessions focused on new technology throughout the meeting, this is mainly concentrated in the Techno-College, which spans Thursday and Friday this year. We will have live surgery from two European cities and other live-in-the-box videos with new techniques and devices. On the last day of the Techno-College we will have the Lion's Den competition where new ideas will be judged by a panel of experts – so if you have new ideas, this is the place to be!

Focus Sessions and Professional Challenges

Here we have a balanced programme that covers all the practices of the modern-day cardiothoracic surgeon. These include: coronary artery surgery, and we promote this as a 'super specialty'; the latest evidence in valve surgery; a comprehensive programme of aortic

surgery, building on the aortic faculty within EACTS; and premier and cutting-edge sessions on thoracic and congenital surgery.

We believe in the motto 'If you want to go fast, go alone. If you want to go far, go with others.' So

we offer joint sessions with other major associations in order to improve the quality of education and underline the multidisciplinary approach of our specialty. We have sessions in conjunction with the Society of Thoracic Surgeons, the European Association of Cardiothoracic Anaesthesiology, the European Respiratory Society, the European Board of Cardiovascular Perfusion, and many more.

Clinical Evidence

Clinical evidence is an important factor when choosing the right treatment for the right patient. At the Annual Meeting, we provide clinical evidence in two tracks: new evidence, coming through the Abstract sessions and, for

"If you want to go fast, go alone. If you want to go far, go with others."



the second year, we have a very popular session on trial updates and the latest evidence. We will also consolidate evidence through the launch and presentation of a number of new clinical guidelines at the Annual Meeting, including joint perfusion guidelines, respiratory guidelines, and more.

We recognise the importance of new clinical evidence, but also the need to educate physicians and surgeons in objectively evaluating it. Too often we see emotional and wishful interpretation of these new

Annual Meeting

I'm here to invite you to the 33rd Annual Meeting!

Continued from page 1

data, rather than objectivity. As such, we have planned several sessions in association with our Analytical Support unit, where we teach how to evaluate clinical evidence. These will take place on Friday and Saturday.

We will also have the very popular Trial Update session on the last day – this is one of the major reasons for you to stay on Saturday! This session will include the two-year MitraFR follow-up results from principal investigator Jean François Obadia.

The hottest topic in cardiothoracic surgery at the moment is the publication of the two TAVI trials on low-risk patient populations. We need to understand the quality of the evidence provided by these trials, which will no doubt influence the future of aortic valve interventions. To assess the quality of these trials we have invited Holger Schünemann, Chair of the Department of Clinical Epidemiology and Biostatistics at McMaster University, Canada – widely considered the birthplace of evidence-based medicine. Professor Schünemann is also the co-Chair of the Grading of Recommendations Assessment, Development and Evaluation (GRADE) working group and co-Director of the World Health Organization's collaborative centre for evidence-informed policy-making. We have also invited the primary authors of these trials to be part of the panel, and we can expect some new evidence to be presented. These sessions will take place on the Saturday.

“We are like a big family: we get together once a year to celebrate our specialty, to enrich our knowledge with science and culture, to strengthen personal relationships and to create new ones.”

Domenico Pagano

Learning from the greats: Leonardo da Vinci

This year is the 500-year anniversary of the death of one of the greatest figures in history, Leonardo da Vinci. At the Annual Meeting we will celebrate his diverse creativity and enduring inspiration. We will exhibit some of his drawings on human physiology and anatomy and, on the Saturday, we will explore his impact on various aspects of cardiothoracic surgery with the help of four great historians and speakers. This will be a truly unique session, and one you will not want to miss.

Women in Cardiothoracic Surgery

I am delighted to announce that we will launch a very important initiative at the Annual Meeting – the **Women in Cardiothoracic Surgery committee**. Our specialty has rightly recognised that we need to improve how we promote and support the development of women in

training and leadership. Our progress has been too slow, but the Association is now taking significant strides in this area and will continue to focus on the future of women in the field, which will be spearheaded by the new committee.

New website – coming soon!

We are also improving our digital footprint by developing a first-class digital platform. Just a few days ago we commissioned the redesign of our website. It will be a more interactive user experience with many more advanced features, and we hope to launch the first redesign at the Annual Meeting.

Join us in Lisbon

Alas I am now running out of space to mention all the other important highlights of the Annual Meeting, such as the quality improvement sessions where allied professionals talk about best evidence to look after patients. And there are many, many more examples.

The Annual Meeting is an important event. And as with all great events, its aim is not only to attract people to scientific sessions. We are like a big family: we get together once a year to celebrate our specialty, to enrich our knowledge with science and culture, to strengthen personal relationships and to create new ones. More importantly, we have fun – and on that note, I welcome you to join us at this year's Annual Meeting and at our farewell party on Saturday evening.

Domenico Pagano

EACTS Secretary General

A fond farewell to our Executive Director...

Long-serving Executive Director Kathy McGree has retired from the Association this year. We would like to thank Kathy and celebrate the many successes that she has led with the executive team over many years. We all wish her well. Kathy will be attending the Annual Meeting and we hope you get the opportunity to say farewell personally and to thank her for all her hard work.

While the Association will miss Kathy, we are currently in the process of appointing a Chief Operating Officer and we hope to have more news to share by the time we reach the Annual Meeting.

Domenico Pagano

EACTS Secretary General



Kathy McGree has led the executive team for many years, contributing to the continuous growth and incredible success of our Association. Her work and expertise have always been appreciated by our members. She has been an important link between our Association and various professional societies across the world.

We will miss her pleasant and friendly attitude and we are certainly looking forward to thanking her during our next Annual Meeting in Lisbon this October. We all hope she will enjoy her retirement in good health and strong spirit.

Ruggero De Paulis

EACTS President

Annual Meeting & Academy

The EACTS Acquired Cardiac Disease Domain



Thomas Walther University Hospital, Frankfurt, Germany; Chair, Acquired Cardiac Disease Domain

October 3 to 5 this year! We are very much looking forward to seeing you as you attend the many different sessions on offer.

This year's Acquired Cardiac Disease Domain programme will feature many interesting sessions, including didactic state-of-the-art lectures, abstract sessions, live-in-box video presentations and training courses. Topics to be covered include the latest evidence in coronary artery bypass grafting, aortic valve repair and aortic valve replacement, indications and technical aspects as well as longer-term outcomes of transcatheter aortic valve implantation, mitral valve repair or replacement, transcatheter techniques to treat mitral valve disease, therapy for heart failure and new ideas in the miscellaneous sessions. Experts in different fields will provide structured overviews in order to summarise session content and provide perfect learning experiences.

Additionally, two major Techno-College sessions – featuring live surgery and the latest technical developments – will focus on topics including endoscopic mitral valve therapies, new ablation strategies, updates

on the latest TAVI technologies, minimally invasive access options and tricuspid valve therapies. We are confident that, as in previous years, these sessions will generate some of the true highlights of the Meeting.

We hope that by raising your interest in the new developments and medical advances in adult cardiac surgery, you will be encouraged to participate in one of the different Task Forces of the Acquired Cardiac Disease Domain within EACTS. These Task Forces are made up of international colleagues who have an interest in developing our speciality further. Currently the following Task Forces exist: New Technology, Coronaries, Arrhythmia, Heart Failure, Mitral and Tricuspid therapies, Imaging, Transcatheter Techniques, Aortic Valve Surgery, and Aviation Medicine.

If you are an EACTS member and wish to participate in one of the above Task Forces please apply via your EACTS user account in the Self Nomination area.

I very much look forward to welcoming you in Lisbon and wish you a nice summer in the meantime.

Thank you very much for your interest in adult cardiac surgery and for your upcoming participation at the EACTS Annual Meeting, held in Lisbon from

Great news for EACTS journals

The new impact factors for the EACTS journals have been released and we are happy to announce that both the *European Journal of Cardio-Thoracic Surgery (EJCTS)* and *Interactive CardioVascular and Thoracic Surgery (ICVTS)* have reached their highest ever level:

- The 2018 Impact Factor for *EJCTS* is 3.847, an increase of 0.343 on 2017
- The 2018 Impact Factor for *ICVTS* is 1.931, an increase of 0.175 on 2017

You can discover the 10-most cited articles from each journal here:

https://academic.oup.com/ejcts/pages/highly_cited

We are grateful for your continuous support of the journals and thank all of you who have contributed to their success.

APPLICATIONS NOW OPEN for Chair of the Women in Cardiothoracic Surgery Committee

EACTS is recruiting a dedicated cardiothoracic surgeon to lead the newly formed Women in Cardiothoracic Surgery Committee at EACTS. This recently established Committee aims to encourage more women surgeons in the field of cardiothoracic surgery, as well as identify and promote educational and professional opportunities for women surgeons in the sector and within EACTS.

Working with the EACTS Secretary General, the Committee Chair will take the lead in the establishment of the Committee. The Chair will be responsible for recruiting Committee members, developing the Committee's aims, leading its activities, and ensuring that the activities are in line with its objectives and EACTS' mission to raise standards in education and training.

The ideal candidate will be an established surgeon with significant clinical experience and exceptional skills in team leadership, and will have an excellent track record in promoting equal opportunities and developing programmes for cardiothoracic surgeons. The successful applicant will have a strong interest in encouraging women in the cardiothoracic surgery field and a firm belief in EACTS' mission and values.

EACTS membership is a prerequisite to apply for this role. Applicants are encouraged to apply by forwarding their CV and covering letter, addressed to Professor Domenico Pagano, EACTS Secretary General, via email to Stephanie Halksworth (Stephanie.Halksworth@eacts.co.uk).

**Deadline for application:
31 July 2019**



Annual Meeting & Academy

Congenital Domain 2019 calendar

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

At the 33rd Annual Meeting in Lisbon the Congenital Domain will feature a roster of 14 sessions. We think that the Annual Meeting should honour presentation of original work, thus all but one of the sessions has been assembled from abstract presentations and featured lectures by experts. Among the abstracts received, 36 have been selected for oral presentation, 18 of which will be held in Rapid-Response sessions. This format has been particularly appreciated in the last few years due to the animated discussion that is often generated.

This year we have two sessions dedicated to adult congenital heart disease, a topic more and more prevalent in congenital meetings. Two invited lectures will address fundamental aspects that include the status of adult congenital management in Europe, and the long-term neuro-psychological, social and working aspects that patients face after correction of their heart disease.

Two sessions will be dedicated to single ventricle lesions – one to hypoplastic left heart syndrome (HLHS) and the other to the complex problem of atrioventricular valve regurgitation in single ventricle reconstruction. Another session is dedicated to updates on mechanical circulatory assist devices in children – a field of continuous evolution.

Other topics that will be touched upon include coronary disease in children, valve surgery in children and Ebstein's anomaly.

This year, as a novelty, we wanted to include the presentation of clinical scenarios with interactive discussion of possible therapeutic options. These will take place during two sessions ('Ebstein Disease'



and 'AVV Regurgitation in SV'; see session listings for details). The underlying idea is to mimic what normally happens in our surgical units when patients are presented and discuss, in an interdisciplinary manner, how we can establish a pathway for treatment.

We will also host a session dedicated to innovative surgical techniques, illustrated by eight video presentations.

Finally, an important session entitled 'Knowledge Generation in Congenital Heart Surgery' is dedicated to the analysis and discussion of evidence derived from the latest guidelines and trials in congenital heart disease. Two invited lectures will address topics from the EACTS–AEPC existing guidelines on transposition of the great arteries (TGA) and truncus arteriosus, the latter being almost ready for publication, and a third lecture will be dedicated to expert consensus related to management of anomalous aortic origin of coronary arteries.

We also know that existing guidelines for the management of valvular and aortic diseases do not accurately fit the young and/or congenital patient. Keeping this in mind, two lectures will discuss management of aortic dilation in the congenital patient and the role of the Ross operation

in aortic valve replacement.

The final lecture of this session will be dedicated to evidence generated by a single-ventricle reconstruction trial – an important prospective multicentric study dedicated to HLHS.

Like last year, the level 3 Congenital Skills Course will be held immediately after the Annual Meeting from 6 to 7 October in Paris, France.

This year's venue will be the Centre Chirurgicale Marie Lannelongue, a centre that has accumulated enormous experience in treatment of TGA over the last 35 years. The two-day course, organised by Emre Belli and myself, is dedicated to surgical treatment of simple and complex forms of TGA. It will include interactive lectures, live-in-a-box videos and live transmissions from the operating room, all guided by a panel of renowned European and North American surgeons.

Finally, there is also the level 2 course on management of congenital heart disease, held November 12–15 in Windsor, UK. This course is dedicated to advanced residents or junior surgeons training in congenital heart surgery. This year we'll aim to include more discussion on clinical cases.

.....
For more information on the Annual Meeting sessions held this year, head to: <https://www.eacts.org/annual-meeting/>. Detailed programmes for the level 2 and level 3 courses can be found on the EACTS website at <https://www.eacts.org/educational-events/programme/>

Congenital Domain sessions at the 33rd Annual Meeting in Lisbon

Day	Session	Time
Thu 3 Oct	Mechanical Circulatory Support	08:30–09:30
	Congenital Rapid Response 1	09:45–11:15
	Knowledge Generation in CH Surgery	11:15–12:45
	Management of ACHD 1	14:30–16:00
	Management of ACHD 2	16:15–17:45
Fri 4 Oct	Coronary arteries in CHD	08:00–09:30
	Training Village hands-on session: Ross procedure (reinforced Ross, root or subcoronary Ross)	08:00–11:15
	Congenital Rapid Response 2	09:45–11:15
	Management of HLHS	14:00–15:30
	AVV Regurgitation in SV	15:45–17:15
Sat 5 Oct	Congenital Video	08:00–09:30
	Ebstein Disease	11:45–13:15
	Congenital Valve	13:30–15:00
	Congenital Miscellaneous	15:15–16:45

Annual Meeting & Academy

The 2019 Thoracic programme

Eric Rössner University Hospital Mannheim, Germany; Chair, Thoracic Disease Domain

Thoracic topics at this year's Annual Meeting will cover a broad range of specialist areas, ensuring full immersion in cutting-edge techniques, guidelines and best practises. Some of the highlights from the expansive programme include: Techno-College sessions on new technologies beyond robots, complex sleeve resections, 'how to' teaching and very advanced surgery with live-in-a-box videos; a joint session with the European Respiratory Society (ERS) on mesothelioma, including presentation of the new joint guidelines; a joint EACTS-STS-ASCVTS session on international perspectives on lung cancer screening; and other great, high-level abstracts across all fields of thoracic surgery.

Throughout the year we also feature three Thoracic Surgery courses, the first of which took place from 4 to 6 April at the EACTS Headquarters in Windsor, UK. Part I of the series (pictured) offered greater insight and up-to-date knowledge on different aspects of thoracic surgery related to lung diseases with emphasis on lung cancer, infectious diseases, lung resection and transplantation. There was also a hands-on dry-lab session on bronchoscopy placement of double lumen tubes and bronchial blockers.

Thoracic Surgery: Part II will be held 5-7 September in its new location of Mannheim, Germany. Easy to reach from Frankfurt International Airport or directly via international train services, the second of this year's courses will feature fantastic international speakers who are experts in their field.



The main topics and sessions that will be showcased include: Chest wall, surgery for metastasis and mediastinum; hands-

on sessions on chest wall repair; energy devices, lasers and the latest DaVinci XI dual console system. The target audience is intermediate level trainees, junior consultants and anyone preparing for the EBCTS or EBTS exams.

Part III will be hosted in Porto, from 28 to 30 November. There we will focus on extended resections, hands-on sessions on sleeve resections, and much more. Final-year trainees, junior consultants and anyone preparing for EBCTS or EBTS are encouraged to attend.

We look forward to seeing you in Lisbon, Mannheim and Porto!

Spaces are limited for each of the above courses so do not delay – register via the EACTS website: <http://www.eacts.org/educationalevents/academy/>



Annual Meeting & Academy

A hot summertime awaits the Vascular Domain



Davide Pacini



Davide Pacini S.Orsola-Malpighi Hospital, University of Bologna, Italy; Chair, Vascular Disease Domain

This year started with great success thanks to the traditional appointment of the 'Introduction to Aortic Surgery' course (pictured), held 14–16 March in Windsor, UK, about which participants gave extremely positive feedback – better than ever before. Aimed at residents and young surgeons wishing to broaden their experience in the aortic pathologies, this year's highly interactive course covered major aspects of the aortic valve, ascending aorta and arch, all the way to the descending thoracic aorta.

Invited experts supported delegates with

keynote presentations and supervision during wet labs, dry labs and hands-on simulations of valve sparing procedures, arch repair and aortic root enlargement techniques. Live-in-the-box cases gave the opportunity to engage in practical training during the course. Delegates were also trained in the basics of thoracic endovascular aortic aneurysm repair (TEVAR) via a dedicated simulation session.

The second part of 2019 is even more attractive, with the Advanced Skills Course on 'Reconstruction of the Aortic Valve and Root: A practical approach' taking place from 18 to 20 September in Homburg Saar, Germany, during which Hans-Joachim Schäfers and his team will share knowledge and concepts in a workshop that has been specially designed in a didactic way to allow

participants to reproduce the content.

The Vascular Domain is also working hard to offer an educational programme on TEVAR via multi-stage courses. The aim is to join the Hybrid Surgeon Educational Programme, thereby offering proof and certification of an acquired skill competence. Two fellowships will be provided to support and encourage this programme. The objectives of the endovascular courses will range from the basic principles of imaging and transcatheter skills to the management of more complex thoracic and thoraco-abdominal aortic pathologies. Participants will be able to work in a hybrid room and practice on C-arm; they will also be actively involved in the use of simulators and animal models.

This year, and following the success of the previous edition, the Vascular Domain programme of the EACTS Annual Meeting will include several focus sessions that will alternate with Abstract and Rapid-Fire sessions. All the aspects of aortic disease treatment – from the valve to the abdominal aorta – will be covered and discussed. Masters in aortic surgery from all over the world will make their contribution, underlining the Annual Meeting as a unique event.

Throughout the calendar, the Vascular Domain will continue to spread aortic knowledge and promote research and education on vascular pathologies. We hope you stay tuned for future events and join us in the next 'hot' period!

Academy

Endoscopic Port-Access Mitral Valve Repair Drylab Training

Peyman Sardari Nia

Maastricht University Medical Center, the Netherlands

Endoscopic mitral valve repair is one of the most difficult procedures to learn. The learning curve is steep, which is partially linked to the fact that the operation is conducted with long-shafted instruments, with the surgeon looking at a monitor rather than into the wound. Acquiring endoscopic skills with long-shafted instruments is a process that no one can escape from.

However, acquiring these skills in patients is not logical or efficient, thus in 2012 I initiated a project to develop a high-fidelity minimally invasive mitral valve simulator (MIMVS). Fidelity in simulation has traditionally been defined as "the degree to which the simulator replicates reality"¹.



Obviously, a simulation platform should be realistic and mimic the procedure setup.

In addition to this, and fundamental to

learning, is feedback. There is no efficient learning without feedback, and indeed it has

Continued on page 8



EACTS
European Association For Cardio-Thoracic Surgery

Academy Training

Aorta Transplantation
Congenital Heart Disease
Coronary revascularisation
Oncology Arterial Grafting techniques
ECMO Surgical Pectus
Aortic Cardiac Surgery Vascular
Thoracic Cardio-Thoracic Valve Surgery

2019

**Endoscopic Port-Access Mitral Valve Repair
Drylab Training**

2-3 September, Maastricht, The Netherlands

**Reconstruction of the Aortic Valve and Root:
A practical approach**

18-20 September, Homburg Saar, Germany

Fundamentals in Cardiac Surgery: Part III

21-25 October, Windsor, UK

Congenital Heart Disease

12-15 November, Windsor, UK

Thoracic Surgery: Part II

5-7 September, Mannheim, Germany

**Congenital Skills Course:
Transposition of the great arteries (TGA)**

6-7 October, Le Plessis-Robinson, France

**4th EACTS Mechanical Circulatory Support
Summit**

7-9 November, Prague, Czech Republic

Thoracic Surgery: Part III

28-30 November, Porto, Portugal

**Endoscopic Port-Access Mitral Valve Repair
Drylab Training**

9-10 December, Maastricht, The Netherlands

Raising Standards Through Education and Training

www.eacts.org

Academy

Endoscopic Port-Access Mitral Valve Repair Drylab Training

Continued from page 6

been shown that if the feedback is provided in an objective and reproducible manner, the learning process is more efficient². Therefore, the aim of the project was to create a platform that was realistic and could provide feedback regarding the skills that one would like to develop, namely, a platform that could be used to train oneself objectively, repeatedly, and in a reproducible manner.

In 2013 we developed a prototype which I used to start the endoscopic mitral valve programme myself, and to refine my skills. Because of the success of the platform, we received funding from Maastricht University Medical Center to develop an industrialised platform. We assembled an engineering group that I worked with to actualise my ideas. We were able to create a high-fidelity simulator that provides a platform on which to train endoscopic skills repeatedly and objectively.

Additionally, the simulator we created provides the objective assessment and feedback essential in any simulator-based training. What's more, the disposable mitral valve is made of special silicone, developed by us, that provides a true suturing experience.

We were awarded the EACTS Techno-College Innovation Award in 2014. At that time, we envisioned using this platform to train surgeons, as well as for pre-operative planning. Ever since, we have striven to bring this innovation from bench to reality. We recently published the process involved in development of this simulator in the *Journal of Thoracic and Cardiovascular Surgery* to stimulate the development of this field. During various educational programmes, 99 senior surgeons validated the platform for use in training of minimally invasive mitral valve surgery.³

Furthermore, we developed a process for modelling and 3-dimensional (3D) printing of different mitral valve diseases for procedural planning and simulation, based



on 3D transoesophageal echocardiography (TOE). We published the results recently in the *European Journal of Cardio-Thoracic Surgery*. Disposable 3D-printed pathological silicone replicas can be mounted into the simulator so that one can also be trained in any repair technique on any pathology of the mitral valve.⁴ We also provided proof of concept of the use of 3D printing and simulation in prospective patients for procedural planning.⁵

In 2015, we founded the EACTS Endoscopic Port-Access Mitral Valve Repair Drylab Training course using the high-fidelity simulators. This course has since been organised 18 times in Maastricht. The course was designed based on the latest educational science and is structured like an air-pilot-training concept course, starting with technical and theoretical pre-assessment and two subsequent days of intensive training on simulators, mixed with interactive presentations and videos regarding all aspects of the endoscopic mitral repair programme. The course ends with technical and theoretical post-assessment.

The aim of the course is to provide a formula for success for those who would like to start an endoscopic programme, and provide standardised education. For example, we used the high-fidelity mitral valve simulator to develop a suturing map for placement of the annuloplasty ring with minimal tissue manipulation and maximal visual exposure. The suturing map could be helpful for less-experienced surgeons

who are starting to learn the techniques of minimally invasive mitral valve surgery.⁶

We have already trained around 200 surgeons, and our preliminary analyses show very promising results for skill development using the simulator. We presented the results of the endoscopic mitral course during the AATS annual meeting in Toronto. The majority of participants were senior surgeons. Theoretical pre- and post-assessment showed that participants scored significantly higher on post-assessment. Pre- and post-assessment of skills on the simulator showed that participants could work with long-shafted instruments more accurately and faster. Follow-up of the participants based on course evaluation and a survey showed that over 30% of participants had started the endoscopic mitral programme successfully, while 70% had yet to start due to the right conditions not being in place.

The course is a continuous EACTS educational programme taking place four times a year in Maastricht. The upcoming dates for the course can be found on the EACTS Academy website at www.eacts.org/educational-events/academy/.

I am looking forward to welcoming all those interested in taking part in Maastricht.

References

1. Beaubien J, Baker P. The use of simulation for training teamwork skills in health care: how low can you go? *Qual Saf Health Care*. 2004;13(Suppl):i51-6
2. Cates CU, Gallagher AG. The future of simulation technologies for complex cardiovascular procedures. *Eur Heart J*. 2012;33(17):2127-34
3. Sardari Nia P, Daemen J, Maessen JG. Development of a high-fidelity minimally invasive mitral valve surgery simulator. *The Journal of Thoracic and Cardiovascular Surgery* 2019;157(4):1567-1574.
4. Daemen JHT, Heuts S, Olsthooft JR, Maessen JG, Sardari Nia P. Mitral valve modelling and three-dimensional printing for planning and simulation of mitral valve repair. *Eur J Cardiothorac Surg*. 2018. doi: 10.1093/ejcts/ezy306. [Epub ahead of print]
5. Sardari Nia P, Heuts S, Daemen J, Luyten P, Vainer J, Hoorntje J, Cheriex E, Maessen J. Preoperative planning with three-dimensional reconstruction of patient's anatomy, rapid prototyping and simulation for endoscopic mitral valve repair. *Interact Cardiovasc Thorac Surg*. 2017;24(2):163-168.
6. Sardari Nia P, Olsthooft J, Heuts S, Maessen J. Suturing map for endoscopic mitral valve repair developed on high-fidelity endoscopic simulator. *Multimed Man Cardiothorac Surg*. 2018;2018. doi: 10.1510/mmcts.2018.038.

Conflict of Interest Statement

Peyman Sardari Nia is the inventor of the simulator that is commercialised by Maastricht University Medical Center, Maastricht, the Netherlands.

Acknowledgements

For realisation of simulation platform: We gratefully acknowledge R. Verhoeven, R. Van Veen, S. Overeem, and J. Riddenhof from the Technical Medicine of University Twente, Enschede, the Netherlands, for their contribution to the development of the first prototype in 2013. We also gratefully acknowledge Instrument Development, Engineering & Evaluation (IDEE), Maastricht University, Maastricht, the Netherlands, for their technical support relating to the final design in 2014.

For support of the whole project: Jos Maessen (Head of Department of cardiothoracic surgery in Maastricht), Samuel Heuts, Jean Daemen and Jules Olsthooft (residents and researchers at Maastricht University Medical Center).

For support of the EACTS course: EACTS Council and Office.

Invited faculty during the years: Fredriech Mohr, Randolph Chitwood, Patrick Perier, Martin Misfeld, Robert Klautz, Ludwig Muller, Thomas De Kroon, Mohammad Bentala, Wolfgang Buhre, Sebastiaan Streukens and Yuri Ganushchak.

Theoretical part	Hands-on part	Course attributes
General	General	Two days
<ul style="list-style-type: none"> ■ How to start a programme ■ Repair techniques ■ Perfusion techniques ■ Anesthesiology techniques ■ Operative planning 	<ul style="list-style-type: none"> ■ Instrument handling ■ Suture placement of annulus ■ Suture placement on papillary muscles/leaflets ■ Knot pusher training 	<ul style="list-style-type: none"> ■ Air-pilot training concept ■ Theoretical pre-assessment ■ Technical pre-assessment ■ Objective feedback from simulator ■ Formative feedback from expert
Specific	Specific	
<ul style="list-style-type: none"> ■ Setup ■ Groin Cannulation ■ Port access ■ Steps of operation ■ Complications ■ Troubleshooting 	<ul style="list-style-type: none"> ■ Annuloplasty ring replacement ■ Full repair on 3D-printed pathological valve 	<ul style="list-style-type: none"> ■ Theoretical post-assessment ■ Technical post-assessment ■ Course evaluation and follow-up

Academy

The Video-Assisted Thoracoscopic Surgery (VATS) lobectomy course



Richard Milton

St James's University Hospital, Leeds, UK; on behalf of the VATS Course Directors

The third EACTS VATS lobectomy course took place in May in the beautiful holiday town of Wendisch Rietz, just outside of Berlin, Germany, and a few minutes walk from the Scharmützelsee lake. This quaint little resort is also the location of Medizin-im-Gruenen, the venue for this year's course. The head of the facility, Heiko Ziervogel – supported by an excellent team of IT and veterinary specialists – was an excellent host, making all of the EACTS team, faculty and delegates alike feel perfectly at home.

The course focuses solely and simply on VATS lobectomy. The format of this year's course adhered (for the most part) to the tried and tested formula of our previous courses, with a series of interactive video presentations delivered by an international faculty, covering each of the lobes. Each participant first performed a lobectomy on a cadaveric pig model, and the following



day, performed the same lobectomy on a living porcine patient. The closing session focused on how to deal with intraoperative problems and, more importantly, how to avoid them.

Of course, the attendees were responsible for their patient and the conduct of the operation; intraoperative complications needed to be dealt with promptly to avoid losing their patient. The devil, as always, was in the detail!

As you all know, EACTS takes its educational responsibilities seriously, and the faculty-to-delegate ratio on our VATS lobectomy courses is simply superb. The delegates are incredibly well supported and guided throughout.

For the first time during the course, both delegates and faculty had the opportunity to experience the LapSim, a simulator model incorporating haptic feedback and different modules for training – from basic surgical skills up to a full lobectomy. In the near future, all five standard lobectomies will be possible. Simulation plays an increasingly important role in the training of junior and established surgeons, and I hope this is something that we can continue to include for future courses.

.....
Dates for the next VATS course will be announced on the EACTS website: <https://www.eacts.org/educational-events/programme/>

Training Management System

Keep your surgical career on track

A tool for residents and trainers to co-ordinate their training programmes.

For more info contact portfolio@eacts.co.uk

Academy

STS/EACTS Latin America Cardiovascular Surgery Conference

22–24 November 2019, Cancun, Mexico



José L Pomar Hospital Clinic and University of Barcelona, Spain; on behalf of the Programme Directors

EACTS, together with the Society of Thoracic Surgeons (STS) and our colleagues from Latin America are delighted to announce the third annual STS/EACTS Latin America Cardiovascular Surgery Conference, taking place in Cancun, Mexico this November.

Attendees can expect an outstanding educational programme spanning coronary artery disease, valvular heart disease, thoracic aortic disease, atrial fibrillation, the surgical management of heart failure and additional tracks covering congenital heart disease, research, databases, leadership and fellowships.

The conference is for young surgeons, residents and fellows from all over the world, with particularly strong links to Latin America. Cardiothoracic and cardiovascular surgeons, cardiologists, anaesthesiologists, perfusionists, physician assistants, nurses and other interested healthcare professionals are all more than welcome to attend.

Because we understand that skills are obtained not just by observing step-by-step techniques performed by masters in the field, this year we have organised wet labs and simulator training sessions led by some of the most prominent

“This year we have organised wet labs and simulator training sessions led by some of the most prominent European and American specialists.”

José L Pomar



European and American specialists. These sessions will span topics including mitral, tricuspid and aortic valve operations as well as procedures of the aorta.

Throughout the proceedings we will feature smaller-format, intimate sessions (e.g. more nuanced topics for smaller audiences) alongside plenary sessions in larger auditoria where highly scientific lectures, abstract presentations and state-of-the-art keynote lectures will be showcased. Simultaneous translation will be offered during all lectures and a selected faculty will also provide the necessary

translation during the hands-on sessions.

As in past years, Course Directors Joseph Bavaria and Vinod Thourani (STS), Juan Pablo Umaña and Nestor Sandoval (Colombia), Patrick Perier and myself from EACTS will head-up this important collaboration with current-, elect- and past presidents of the Mexican Society of Cardiac Surgery Alejandro Rey, José Antonio Heredia Delgado and Edgar Samuel Ramírez Marroquín, respectively.

The STS/EACTS Latin America Cardiovascular Surgery Conference is establishing itself

as a very important event for our specialty around the world. Therefore, much care has been taken in selecting speakers, topics and moderators that will ensure the conference has the highest impact in the education of our young, up-and-coming colleagues.

We very much look forward to seeing you in Cancun in November!

We encourage all professionals interested in attending this unique two-and-a-half day conference to send their scientific abstracts via the official webpage www.cardiovascularsurgeryconference.org

Association

EACTS Membership

While each of our members is unique, one thing they all have in common is a thirst for knowledge – and they rely on EACTS to deliver it. When you become an EACTS Member you enter into a mutually beneficial agreement to actively cultivate the objectives of EACTS and to work closely with EACTS to associate all medical and non-medical staff involved in all aspects of cardiac, thoracic and vascular interventions.

Consequently, EACTS looks for members who are leaders in their fields. With this depth and breadth of content and networking opportunities, the EACTS Membership offers excellent opportunities. Membership provides access to a network of knowledge and the opportunity to develop your own expertise and share this with fellow professionals.



EACTS Membership benefits include:

- *European Journal of Cardio-Thoracic Surgery (EJCTS)*; currently provided in both print and online*
- *Interactive Cardiovascular and Thoracic Surgery* (online)
- *The Multimedia Manual of Cardio-Thoracic Surgery (MMCTS)*
- Reduced rates to EACTS for the Annual Meeting and other EACTS meetings/courses held during the year
- EACTS Training Management System for resident programmes
- Complimentary subscription to the Society’s quarterly newsletter, *EACTS News*
- Opportunity to participate in the work of EACTS, either in committees or journals

- Online services through www.eacts.org with a personal web page on the online cardiothoracic surgery network, www.ctsnet.org
- Membership Certificate

.....
We are pleased to announce that we have received 301 complete membership applications that are now going forward to the General Assembly for final approval at the 33rd Annual Meeting on Thursday 3 October 2019. A three-fourths vote of those present is required to elect a member. We are now taking applications for 2020 so please spread the word amongst your peers. Head to www.eacts.org/the-association/membership/ for more information.



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



Association

Francis Fontan Fund Fellowship in Advanced Postoperative Critical Care

Davide Carino

Hospital Clínic de Barcelona, Spain

Cardiac surgery training is a complex and variegated pathway. As such, a trainee can benefit immensely from periods of intensive focal learning on key topics in cardiac surgery, as well as by stepping outside of their comfort zone, spending time in different institutions and training landscapes and gaining wider experiences essential for professional and human growth.

These essential components were at the forefront of my mind when I applied for the Francis Fontan Fund (FFF) Fellowship in Advanced Postoperative Critical Care. When I received the notification that my application had been successful, I was pleased, honoured and also proud of myself because I knew that I had passed through a long and very strict selection process.

The fellowship started in January 2019 at the Hospital Clínic de Barcelona, Spain, and from the very first day it was clear to me that this would be a great experience. Every member of the department was extremely kind, from Chair Manuel Castella to the first-year residents and all of the nursing team. They made myself and Nikita Mehta (University of Nairobi, Kenya) – the other recipient of the fellowship – feel very welcome.

A special thank you is in order for our mentor during the fellowship, Eduard Quintana. Other than being an outstanding surgeon, he is an extremely nice person and it was (and for me, still is) really a pleasure and an honour to work under his mentorship.

From a clinical perspective, the fellowship lived up to my expectations and beyond. Nikita and I had the opportunity to be involved in all of the activities carried out in the department, and I personally learned a lot. We had the opportunity to be scrubbed-in for many complex cases covering the whole spectrum of adult cardiac surgery, and I learned a great deal regarding the postoperative management of such complex cases.

Hospital Clínic de Barcelona has a very active programme of extended septal myectomy, thus we had the opportunity to be involved in all aspects of the hypertrophic obstructive cardiomyopathy surgical therapy, from patient selection to postoperative care. Moreover, we had the opportunity to increase our knowledge in the field of surgical treatment of end-stage heart failure, infective endocarditis, grown-up congenital heart



Several members of the Barcelona cardiac surgery team. From left to right, second row: Fernando Lopez, Elena Sandoval, Davide Carino, Jesus Ruiz. First row: Robert Pruna, Eduard Quintana, Manuel Castella, Nikita Mehta, Daniel Pereda, Jorge Alcocer, Clemente Barriuso and Stefan Schneider.



FRANCIS FONTAN FUND

and chronic thromboembolic pulmonary hypertension. We also had the opportunity to see many cases of minimally invasive cardiac surgery and off-pump coronary artery bypass grafting with total arterial revascularisation.

In addition, we had the opportunity to learn many aspects of advanced cardiorespiratory resuscitation and low cardiac output status management. I improved my skill with mechanical ventilation (non-invasive and invasive), acute respiratory distress syndrome treatment and nitric oxide management. I increased my knowledge in the field of renal replacement therapy options and epicardial pacing after cardiac surgery. And in terms of imaging experience, I improved my skill with transthoracic echocardiography and transoesophageal echocardiography. I performed percutaneous tracheostomies and saw many fibrobroncoscopies.

We were given the opportunity to take part in cardiac advanced life support, which focused on reanimation after cardiac surgery. This was really useful. We performed a simulation of the MAZE procedure on cadavers, preceded by a great lecture, and we took part in a wet lab for the David procedure led by EACTS President Ruggero De Paulis, which was also preceded by a fantastic lecture.

The fellowship was also very valuable from a research/scientific perspective; we started several research projects that hopefully will result in substantive publications.

Finally, I want to thank EACTS for the opportunity to participate in this fellowship. Hopefully in the future the number of fellowships like this will be further increased by the FFF and the Association, and many other young surgeons will continue to benefit from such an opportunity.

Residents

Residents sessions at the Annual Meeting

The EACTS Residents Committee

This year the EACTS Residents Committee has worked hard to establish collaboration with other societies, and this is mirrored in the residents sessions at the Annual Meeting. Together with Cardiologists of Tomorrow (CoT) from the European Society for Cardiology (ESC), a session called 'The Team is the Key' will be organised. In this session, a heart team consisting of trainee members from both the ESC and the EACTS will discuss complex cardiovascular cases presented by residents.

In another session called 'Trainee in Trouble', representatives from national resident societies from across the continent will discuss cases that ended very badly, or were about to, and what these cases taught them.

Our established classics return to provide both scientific learning opportunities as well as inspiration for career planning: The popular Residents Luncheon will gather



highly esteemed experts and young trainees around a delicious lunch; exciting advanced surgical techniques are described in full detail with video material in the 'How to do it – Live in a box' session; the 'Nightmares in CT Surgery' session will reveal the most disastrous cases of experienced senior surgeons; and the 'Work in Progress' session will give a chance to starting scientists to present their ongoing work and to get feedback at an early stage.

In our 'Career Development' session, the presenters will share tips from their own career path, ranging from how to fit family life around an academic and clinical work schedule, to publishing in high-impact journals.

Since cardiothoracic surgeons often master fascinating talents or interests beyond surgery, the 'Outside the Box of Cardiothoracic Surgery' session is always

a truly inspirational event. This year we will hear talks by surgeons who have performed surgery in crisis areas or who have pursued something completely different, for example winemaking!

Like last year, the residents will have their own dedicated lounge area in the Exhibition Hall, offering a relaxed meeting point for discussions and the sharing of ideas. Especially if you are visiting the EACTS Annual Meeting for the first time, we encourage you to come and participate in our 'backstage-tour', starting from the Residents Lounge and revealing our top picks for sessions and other activities at the conference venue.

And finally, this year's Annual Meeting will also be the platform for the final results from the European Residents Survey, launched last year in Milan. We received more than 200 replies and, to say the least, it has uncovered crucial differences from one country to another when it comes to matters such as the structure of training programmes and the satisfaction of the residents in training.

Looking forward to seeing you in Lisbon!



Residents activities at last year's Annual Meeting in Milan



Residents

New members of the EACTS Residents Committee

This spring, three open positions in the EACTS Residents Committee were announced. From the 12 great and very inspirational applications received from all around the continent, three candidates really stood out and were elected to join the Committee, taking on

the important responsibility to represent the views of European trainees for the next three years.

The new members come from different countries and are in different stages of their training. All of them had a clear vision of what they would like the Residents Committee

to focus on in the coming years to further improve the level of cardiothoracic surgical training in Europe. Now, right before the start of their membership, we asked for their perspectives on why they applied, and what focus they would like to see from the Residents Committee in the coming years.



Omar Jarral

St. Thomas' Hospital,
London, UK



Josephina Haunschuld

University of Leipzig / Leipzig
Heart Center, Germany



Kirolos Jacob

University Medical Centre
Utrecht, the Netherlands

operations and motivate young residents to involve more in translational research.

KJ: As an active member of the EACTS Residents Committee I would promote standardisation of education and residency programmes across Europe. The EBCTS exams have the purpose of creating theoretical knowledge uniformity for European residents. However, there is still no formal inquisition of practical skills by a resident. An idea could be to not only employ such a theoretical Board test but to add to it a practical exam.

Also, within EACTS I would additionally like to advocate building inter-societal and international cooperation. Building bridges between EACTS and (for example) the ESC will result in a stronger standpoint in political debates and when acquiring the necessary funding that is needed to set the best evidence-based education and care for cardiovascular diseases in Europe.

International cooperation may also result in organising charity expeditions to developing countries. Not only would the less-developed countries benefit

How did you hear about the open positions in the EACTS Residents Committee?

OJ: I read about the position in the EACTS Residents Newsletter.

JH: I heard about the open positions from a current Residents Committee member during an EACTS Academy course.

KJ: I heard about the position via a friend of mine who is in the Committee and is leaving his position this October after three years. So he asked me if I wanted to join and I thought it was a very nice idea to be able to be part of such an international and active committee.

"I see EACTS as the most innovative cardiothoracic association in the world."

Omar Jarral

What convinced you to apply for the EACTS Residents Committee?

OJ: I decided to apply as I see EACTS as the most innovative cardiothoracic association in the world. As I am now approaching the end of my training, I am keen

to participate in shaping the future of training for residents in Europe and am motivated by the idea of collaborating on meaningful projects.

JH: I think it is essential that all European residents have a group of representatives that can defend their interests and can vouch for excellent training opportunities and a transparent education system. As a member and current speaker of the German residents' club I have seen how important it is to take your chance and fight for better surgical training.

KJ: For me, the prospect of being able to work and discuss cardiothoracic topics face to face with residents and cardiothoracic surgeons from every corner of Europe tipped the scale. It allows highly informative discussions regarding differences in the approach to, and practice of, cardiac surgical and public health issues. Moreover, it enables me to meet many colleagues from all over the world and establish long-lasting friendships. I am really looking forward to working in such a thrilling environment.

"It is essential that all European residents have a group of representatives that can defend their interests."

Josephina Haunschuld

What kind of activities would you like the Residents Committee to focus on with your help?

OJ: I think there are two important challenges facing many European residents at the moment. First is low overall case volume compared to the generation of surgeons before us (due to increasing patient complexity and other factors). Secondly, many training programmes are not equipping residents with the skills (e.g. academic grounding, transcatheter and minimal access skills) needed for them to be relevant over the next twenty years. If we could work on some initiatives focusing on these areas I think it would be impactful.

JH: Personally, I would like to engage in improving international research co-

from expert surgeons from Europe ... European residents and young consultants would also gain invaluable experience in executing major surgery with limited resources.

"I would promote standardisation of education and residency programmes across Europe."

Kirolos Jacob

Residents

My first year in the EACTS Residents Committee

Alicja Zientara

Harefield Hospital, London, UK

In October 2018 at the EACTS Annual Meeting in Milan I received the invitation to join the Residents Committee. Ten other junior doctors and I had applied for a position in the Committee, which for me came after being involved in my national residents club which had started to build up its first connections to the European association. The Residents Committee members ranked my application using an objective score for my CV, and evaluated my motivation letter. Fortunately, they welcomed me as a new member who would serve for the following three years.

Since joining I have attended three meetings at the EACTS headquarters in Windsor, UK, and two congresses where I have been in touch with my Committee colleagues. In the first meeting, the roles and division of work within the Committee became more transparent to me. The Committee consists of nine members (a mixed group of thoracic and cardiac surgeons) who represent surgeons in training and are involved in EACTS Task Forces and Domains. One member represents the



management group. Each member gets the chance to work on a project as part of a task force, or they can assist in organising events and undertake journalistic work.

What would be my main task in the Committee?

Personally, I was interested in building standards in education and in strengthening the position of the European education system. A great opportunity came up when the newly founded EACTS Education Committee agreed to accept a junior member. The purpose of this important group is accreditation and quality control, as well as the implementation of educational tools that are designed by EACTS.

National societies get in touch with the Residents Committee for their national congresses. This year we had the chance to attend the Portuguese, French and German Society meetings to close the gaps between

training systems, to inform on differences between countries, and to emphasise the need for an international standard and a platform for exchange. I had the great pleasure to visit the French congress in Rennes to give an overview of the training systems used in the countries where I have been trained.

As one of my further interests, I was very motivated to work on a collaboration with the European Society for Cardiology's Cardiologists of Tomorrow. We hope to define common interests and learn from each other's experiences – not only on a medical level, but also with regards to the management of a junior committee. The first steps have now been taken. We are aiming for a better exchange of skills and academic work.

This year, three members are going to leave the Committee after three successful years of efficient and dedicated work. Taking their place will be three recently selected members (page 14), chosen from a total of 12 applications – all of a high standard, and all exhibiting great ideas and an outstanding interest in our profession. It is unquestionable that the Residents Committee gains more and more visibility as time goes by.

The Committee represents a great opportunity to become an active member

“The Committee represents a great opportunity to become an active member of the Association.”

Alicja Zientara

Committee in the EACTS Council, thereby securing an opportunity to discuss new ideas and plans.

From the beginning it was clear that each member fully shares in the Committee's dedication to the improvement of training and communication. Projects such as the Residents Survey and organisation of the Annual Congress demonstrate but two important pillars of an outstanding

“Each member fully shares in the Committee's dedication to the improvement of training and communication.”

Alicja Zientara

of the Association. Critical points and improvements are discussed with particular focus on our training and networking across Europe. Our new contacts will cross borders and allow us to navigate our own education with support from the experienced experts of EACTS.



EACTS News

Editor-in-Chief
Peter Stevenson

Editor
Rysia Burmicz
Design
Peter Williams

Publishing and Production
MediFore Limited
Tel: +44 (0) 208 771 8046
mary.kennedy@medifore.co.uk

Copyright

Copyright © 2019: 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.



EACTS
European Association For Cardio-Thoracic Surgery

33rd EACTS
Annual Meeting
Lisbon, Portugal
3-5 October 2019

Exploring New Frontiers of Science

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

www.eacts.org

Raising Standards through Education and Training