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Future challenges and solutions in cardiothoracic surgery

An interview with EACTS President Ruggero De Paulis

Up-to-the-minute training and continuing education in cardiothoracic surgery forms the backbone of the profession's rapidly evolving future. This was the message of EACTS President Ruggero De Paulis during a recent interview with *EACTS News*.

"Our profession – and cardiac surgery in particular – is facing several challenges," he began, noting that exciting opportunities are borne in rising to meet technological advancements.

However, the emergence of new technologies risks increasing both the global developmental gap along international socio-economic borders, and the generational gap. "The learning curve is particularly important for the older generation of surgeons, who will find it more difficult to adapt, and in turn may not effectively pass these teachings on to the younger generation," he said.

"In our everyday practice, we have seen a shift from the standard classic operation of old to a new era of minimally invasive surgery – including smaller incisions and procedures aided by robotics."

In the field of vascular and cardiac surgery, he added, endovascular procedures are increasingly popular, and this is mirrored by the growth of transcatheter techniques in cardiology. Today's cardiac surgeon must therefore become well practised in both classic and interventional techniques.

Professor De Paulis went on: "The cardiac surgeon has to face up to learning these endovascular skills, both to ensure they are equipped with a cutting-edge skillset in vascular surgery, and to enable them to enter into the world of transcatheter valve technologies. The surgeon is probably best placed to know the anatomy of the cardiac valves, so again, obtaining these endovascular skills will make for a better surgeon overall."

He added: "We are dealing with cases far more complicated than in the past. This makes our future challenging, but also very interesting."

To step up to the challenges of modern-day practice, the EACTS/ESVS Endovascular Skills Course has been specifically designed to help cardiac surgeons become acquainted with new technologies and techniques. Featuring a comprehensive review – and simulator training – in various aspects of the endovascular treatment of aortic pathologies, it is a key step in helping young colleagues acquire endovascular skills, stressed Professor De Paulis.

"We are organising this mostly with transcatheter endovascular aortic repair in mind, i.e. for our



"We are dealing with cases far more complicated than in the past. This makes our future challenging, but also very interesting."

Ruggero De Paulis

vascular surgery audience," he said. "But the same transcatheter skills can also be useful to approach aortic valve replacements (and this will soon include mitral valve replacements) which, at the moment, are mostly being done by cardiologists and to some extent cardiac surgeons."

To that end, endovascular skills must also be enshrined in residency courses, he added. "What the Association can do is set an example and offer opportunities. But the true change has to be made within each country. EACTS' role is to help our colleagues in different countries to lobby for these

Association

Future challenges and solutions in cardiothoracic surgery

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Continued from page 1

things to take place.”

Professor De Paulis also spoke of the opportunities in an increasingly interconnected world, with social media offering a means of rapidly sharing emerging knowledge. “The surgical community has probably been too slow in adopting social media,” he said. “We can, for example, share videos showcasing new techniques, or peculiar aspects of individual cases, or the results of research.

“This will change the way we communicate – in fact, it is already happening. But it is not the case for all generations; it comes more naturally to younger people. Furthermore, I believe it is something that could be organised in a better way.”

More generally, he asserted, the proliferation of data presents a pressing need to find better ways of making sense of available clinical evidence. “With changes in technology and different approaches, it is becoming more difficult to make the right choices,” he said. “We need to interpret results better and make evidence-based choices for our patients. Even though more information is emerging every day, at the same time it is becoming less organised.”

At this year’s Annual Meeting in Lisbon, a number of sessions will delve into the results of the latest clinical trials, with emphasis placed on how to interpret their impact. Supported by the recently established EACTS Analytical Support Unit, the sessions will have particular focus on boosting the knowledge of statistical approaches in the cardiothoracic community. “We need to better understand how to properly interpret results, especially when new trials are published,” said Professor De Paulis.

“What the Association can do is set an example and offer opportunities. But the true change has to be made within each country.”

Ruggero De Paulis

“This is something that is becoming more and more important. In these sessions, we will discuss the latest trials from a statistical

point of view, to understand if results have been properly interpreted, and determine whether the conclusions are in line with the data.”

This year’s Annual Meeting continues to develop its three-day format with less overlap between sessions and domains, and more space given to the Techno-College. “We are trying to make it easier for people who want to attend several sessions,” explained Professor De Paulis.

“People have great interest in the cutting-edge technologies presented at the Techno-College, but at the same time they are just as eager to attend the ‘regular’ sessions we offer. This year, I think we can offer the delegates the chance to attend every session they would like.”

Professor De Paulis concluded by noting that this year marks 500 years since the death of Leonardo da Vinci and, as a fitting tribute to his “genius of the past”, this year’s Annual Meeting will draw inspiration from the polymath’s art and invention. “We are organising a plenary session devoted to some historical presentations on da Vinci, including everything he has done relating to the heart and, in particular, the aortic and mitral valves.

“In addition, we hope to organise an exhibition on da Vinci with some of his paintings and anatomical drawings.”

Are you an MMCTS author?

René Prêtre and Roberto Lorusso
Editors-in-Chief, MMCTS

The *Multimedia Manual of Cardio-Thoracic Surgery (MMCTS)* is the world’s only dedicated video-based educational platform for cardiothoracic (CT) surgeons. Published by EACTS as a free service to the worldwide community of CT surgeons, it features nearly 300 step-by-step surgery tutorials, which demonstrate procedures from the most fundamental to the most innovative.

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René Prêtre



Roberto Lorusso

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Why you should join the Adult Cardiac Database

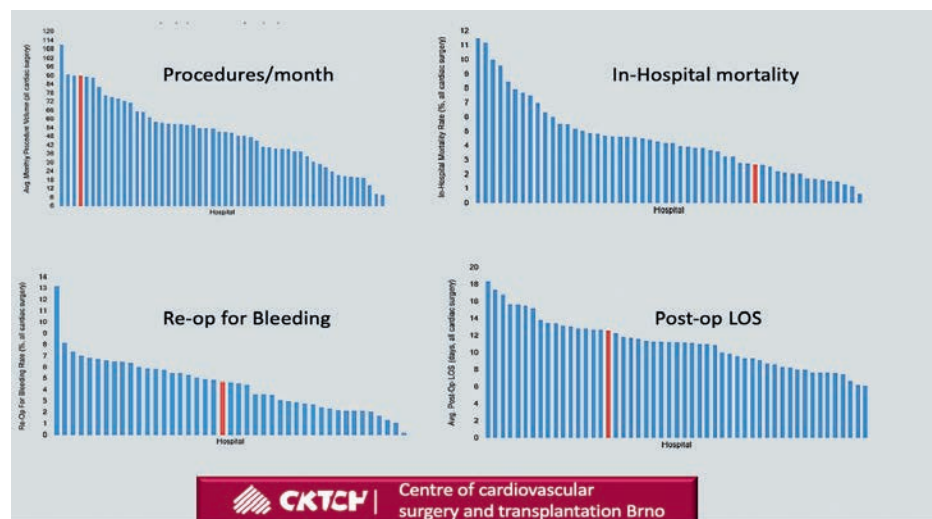


Figure 1



Petr Němec

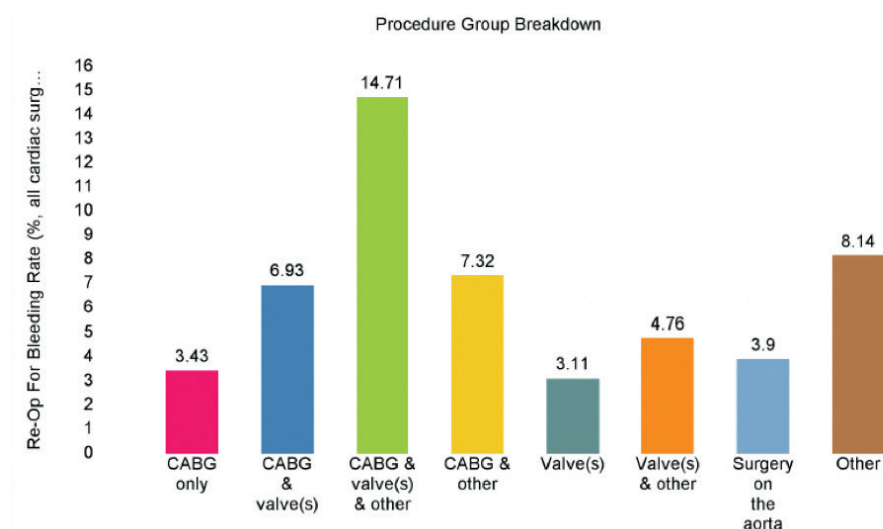


Figure 2

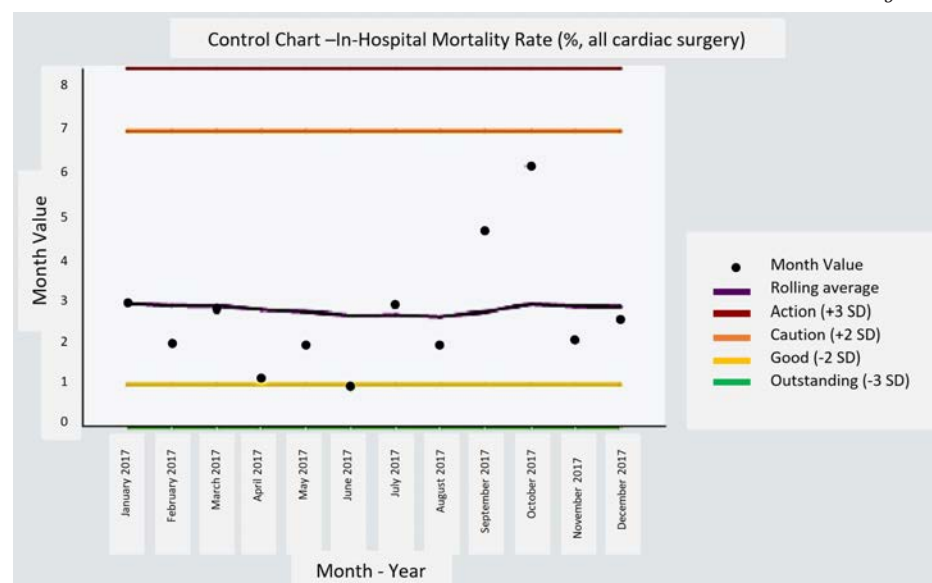


Figure 3

Petr Němec

Centre of Cardiovascular and Transplantation Surgery (CKTCH) Brno, Czech Republic; Chairman of the Czech Society for Cardiovascular Surgery

At the VIIIth Congress of the Czech Society for Cardiovascular Surgery, Theo de By, project manager of the EACTS Quality Improvement Programme (QUIP), explained the many possibilities offered by the Adult Cardiac Database (ACD). The primary aim of the ACD is to achieve quality improvement by comparing the outcomes of a specific hospital within the ACD with the anonymous outcomes of all other hospitals in the database.

To achieve a comparison that justifies the reality of the results, a risk-adjusted analysis can be conducted by means of the ACD benchmarking tool. The tool allows the user/participant to:

- Select and compare according to age, period, urgency, logistic EuroSCORE, outcome, etc.
- Use filters for single or multiple interventions of, for example, coronary artery bypass grafts (CABGs) and valves, but also on-pump/off-pump statistics
- Compare hospital outcomes for institutions with the same volume of procedures
- Produce timelines by means of which one can monitor outcomes over time
- Use control charts in which a rolling average indicates your performance through four simple markers: 'outstanding', 'good', 'caution' or 'action'

Association

Local outcomes benchmarked

In Brno, we initiated our relationship with the EACTS ACD in 2017. We sought the assistance of ÚZIS (Institute of Health Information and Statistics of the Czech Republic), which maintains the high-quality national register of cardiovascular interventions with data from all units in the Czech Republic. The connection between the ÚZIS Register and the ACD, with signed permission granted from our hospital, enabled the transfer of data by means of a secure link to the ACD. Therefore, thanks to the cooperation with ÚZIS, our local data are now found in the ACD, 100% error-free.

Although we are happy with the ÚZIS Registry, **the large volume of data offered by the ACD offers an attractive option to benchmark outcomes on a European level.** Moreover,



ADULT CARDIAC DATABASE

the software offered by the ACD offers direct online statistics. With one click, filters can be activated and 'PowerPoint-ready' bar charts and survival curves can be produced. **The EACTS service now includes bespoke centre reports that are sent to ACD participants on a regular basis.**

In an initial comparison of our outcomes with the ACD (Figure 1), we saw quite favourable results for our CKTCH centre (red bars), with a lower than average re-operative frequency for bleeding, as well as a mortality rate in the lowest quartile of the ACD statistics. In addition, the benchmarking tool offers the possibility to go a few steps further, gaining even greater insight into the data.

Figure 2 demonstrates that, with an overall normal result for post-operative bleeding, the

most frequent occurrence appears after 'CABG, valves and other' surgery. With this in mind, we can concentrate on improving outcomes in those combined procedures.

Figure 3 provides insight into our overall performance through the rolling average data. This shows the average mortality over several months or years. Here, outliers are clearly present, with a frequency that marginally influences overall results.

These charts outline just some of the insights provided for individual users by the ACD benchmarking tool. Each of these charts reveals strengths and weaknesses of cardiothoracic surgery on a local level, compared to the more than 125,000 procedures that are now available in the ACD.

National and international perspectives

With an expansive collection

of European data based on robust local and national data, the ACD offers great potential for quality improvement and benchmarking; EACTS, and its ACD task force, are continuously striving for improvement. EACTS has released a new data dictionary and further developed the data validation policy, both of which strengthen the reliability of the data. International trends will now begin to emerge and will become more transparent.

After our national congress, colleagues from three additional Czech cardiothoracic surgery units all reached the same conclusion that it is absolutely worth joining the EACTS ACD, and have now pledged to do so.

To find out more about the EACTS ACD and how to join, please visit: <https://www.eacts.org/quip/participation/>

Role of the Institute of Health Information and Statistics of the Czech Republic (ÚZIS) and the Czech National Register of Cardiac Surgery (NKCHR)

Svetlana Drábková

ÚZIS (Institute of Health Information and Statistics of the Czech Republic), Czech Republic

Our purpose

The ÚZIS maintains a National Register of Cardiovascular Surgery and Interventions (NKCHR). In 2017, it was decided that our institute would cooperate with the EACTS to ensure 100% compatibility between local, national and European data.

In the Czech Republic, a national register of cardiovascular surgery had been maintained since 1997. In 2002, the NKCHR was established in order to satisfy the needs of all participating cardiac surgery facilities wishing to obtain information on the numbers of heart surgery operations performed in individual centres across the country and to facilitate more precise evaluation and quality analysis of the procedures, including mortality, length of hospitalisation and stratification of the risk factors.

The register includes processed personal



data necessary for identification of the patient, data connected with the status of the patient in relation to the disease, plus all perioperative information. The

register also contains necessary data for identification of the healthcare provider in which cardiac surgery was performed.

Range of data provided by health establishments to the NKCHR

Since the end of 2003, NKCHR has operated as a web application with a central database. The commissioned NKCHR workplace inputs data to the register via a secure https protocol. Access to the register and assignment of user roles is authorised by the administrator of the register.

The additional value of international cooperation

ÚZIS supports the cooperation with the Czech Society for Cardiovascular Surgery and EACTS; we believe in seizing the opportunity to unlock data that are useful for cardiothoracic surgeons to improve their outcomes. For ÚZIS, and most likely for other national databases, our assistance enables the units to evaluate results on a local, national and European level, based on data of consistent quality.

Association

Women in cardiothoracic surgery

Marlies Keijzers

Maastricht University Medical Center, the Netherlands

Cardiothoracic surgery has been historically dominated by male physicians. During the early years after EACTS was founded in 1986, only a few female physicians were EACTS members. Fortunately, during the past decade, the number of female cardiothoracic surgeons is rising! For example, in 2008, only 49 female cardiothoracic surgeons were listed as EACTS members. These numbers increased rapidly to 353 female members in 2018.

At present, around 10% of EACTS members are female physicians, and the field is also getting more popular among young physicians. Out of the 376 EACTS Resident Members, 100 (27%) are women. One can only imagine how these figures will grow 10 years from now!

Opening the door of opportunity

During last year's EACTS Annual Meeting in Milan, a great discussion took place on the role of women in cardiothoracic surgery by Drs Miia Lehtinen, Meghan Helder and Shanda Blackmon¹. These female cardiothoracic surgeons addressed a number of important issues and gave many tips, including the necessity of mentorship.

Most successful cardiothoracic surgeons have had cardiothoracic mentors. Having a mentor early on in your career can help in guiding through important steps on the career ladder, and often opens 'doors of opportunity'. This, of course, doesn't only account for female physicians. From a resident's perspective, I advise other residents to actively search for a mentor. Look for a mentor that can help to answer questions on your personal development as well, such as how to achieve good work-life balance, and how to be successful as a surgeon and also have children.



1. To watch a video of the discussion that took place, please visit: <https://vimeo.com/296155298> or visit the EACTS Media Library (<http://medialibrary.eacts.cyim.com/>)

Teresa M Kieser, Jean J Prieur

Foothills Medical Centre, Calgary, Canada

Although women represent roughly half of the world's population, it has taken a long time for opportunities to emerge for women in many heretofore male-dominated fields. With this comes a major responsibility to be an example to women, but also to the men in the field; that is, not to correct their way of thinking but to make men realise by women's actions, words and thoughts that having women work shoulder-to-shoulder alongside them is a welcome thing.

Women who are pioneers in male-dominated careers live in glass houses and are constantly watched by both women and men in and out of the field. We are all products of our prejudices and our upbringing, and nobody embraces change easily. Ruth Bader Ginsburg was successful in changing the male-dominated Supreme Court of the United States by her philosophy: "If you want to influence people, you want them to accept your suggestions, you don't say, 'You don't know how to use the English language,' or 'How could you make that argument?' It will be welcomed much more if you have a gentle touch than if you are aggressive."

She firmly believed that: "It is not women's liberation; it is women's and men's liberation."

Women in cardiothoracic surgery today are still in the minority. They must champion the cause not by criticism, but by leading by example. There will always be naysayers,



but it must be realised that these people may have been burned by less-than-stellar examples of women in their field.

Feminine attributes are suited to caring for the sick, as women are also blessed with the role of bringing forth and nurturing new life. Being the 'gentler' sex, women too often suffer in silence, yet not speaking out against injustices can lead to misinterpretation. Having the courage to speak up has been counterintuitive to the upbringing of most women.

By not speaking up, women frequently give men the upper hand, so it is imperative to do so if male dominance is to cede to equality between women and men. Change is happening and cannot be thwarted. Madeleine Albright, former United States Secretary of State said: "It took me quite a long time to develop a voice, and now that I have it, I am not going to be silent." If it was hard for someone like Madeleine

Albright, how hard might it be for the rest of womankind?

There is a fine line between speaking with determination and using argumentative, accusatory tones. The truth of the matter is that the line is even finer for women than it is for men. Strong words are anticipated from men, but resented from women. Yet, as Associate Justice Ginsburg also said: "You can disagree without being disagreeable."

The most important attribute a woman can cultivate is self-conviction. In October 2018, Canadian physicist Donna Strickland was the third woman ever to win the Nobel Prize in Physics. When asked her advice for Canada's next generation of scientists, she said: "If somebody else says something that you don't believe in, just think they're wrong and you're right and keep going. Because that's pretty much the way I always think."

It was only after receipt of the Nobel Prize that she was made a full Professor. This is a classic example of the inequity that exists for women, but it is only by taking a higher road that women will succeed.

Having worked with men for more than thirty years, one thing is striking: men seldom complain – they mostly get on with their work. Linda Mickleborough was the first female cardiac surgeon in Canada, and her advice for women wanting to be a cardiac surgeon was: "Don't complain, nobody likes a whiner." We must always be conscious of others who are following us.

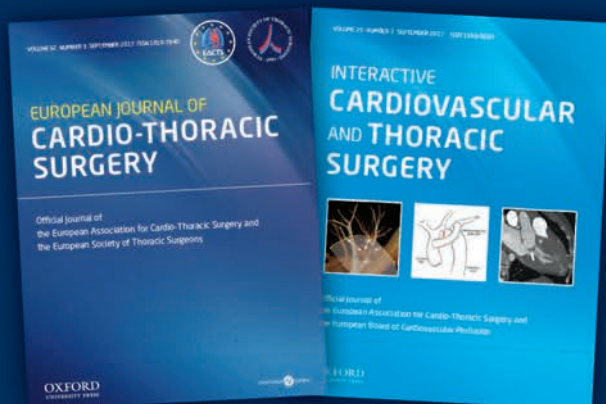
Change can and is happening, but with small, sometimes imperceptible steps, and

Continued on page 8

CALL FOR APPLICATIONS

EDITOR-IN-CHIEF

EUROPEAN ASSOCIATION FOR CARDIO-THORACIC SURGERY



The European Association for Cardio-Thoracic Surgery (EACTS), the premier cardiovascular and thoracic surgery society, is currently accepting expressions of interest from qualified applicants for the Editor-in-Chief position of its flagship journal, *European Journal of Cardio-Thoracic Surgery (EJCTS)*. The journal has greatly expanded its influence under the leadership of Prof. Friedhelm Beyersdorf and his team and has a 2017 impact factor of 3.504. EACTS publishes two additional, influential publications, *Interactive CardioVascular and Thoracic Surgery (ICVTS)* and *Multimedia Manual of Cardio-Thoracic Surgery (MMCTS)*. The *EJCTS* Editor-in-Chief will oversee these two journals' editorial policies and serve as an EACTS Trustee.

RESPONSIBILITIES:

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

QUALIFICATIONS:

- Significant Editorial or Journal management experience
- Strong reputation in the field; maintains solid ethics
- Clear vision of the specialty, as well as developments in journal publishing
- Relates to peers and staff in a positive manner
- Published, peer-reviewed journal author
- Academic appointment and active cardiovascular or thoracic surgeon
- Able to complete a five-year term beginning in June 2020, with preparatory period beginning in October 2019 (term is renewable for five years pending satisfactory completion of first five years)
- Mandatory: EACTS member in good standing

Please submit expressions of interest (CV and Letter of Motivation) to **Kathy McGree, EACTS Executive Director**, (kathy.mcgree@eacts.co.uk) and **Prof. Domenico Pagano, EACTS Secretary General**, (secretary.general@eacts.co.uk) by 30 April. Interviews will be held during the month of July 2019.

www.eacts.org/ejcts-eic



Association

Women in cardiothoracic surgery

Continued from page 6

this is how progress must be. Men are beginning to realise that working with women collaboratively is better, and women are starting to believe in themselves.

Women must come to be seen as

interchangeable with men while still remaining different. Because of the minority status of women at present, a good example of a woman in a male-dominated field causes an ascending spiral of positivity, whereas a non-ideal example may cause a

descending spiral.

The burden for successful women in male-dominated careers weighs as heavily on women as it does on men. The initiating resides with women, and positive engagement is crucial.

Elena Sandoval

Hospital Clínic de Barcelona, Spain

Nina Starr Braunwald was one of the first female cardiothoracic surgeons. Born in 1928 in Brooklyn, New York, USA, she completed her degree at New York University (NYU) School of Medicine, followed by general surgery training at NYU's Bellevue Hospital. She was a true pioneer, going on to lead the first implantation of a prosthetic heart valve (which she also designed) in 1960.

Despite her success, Dr Braunwald struggled to secure new opportunities as her career progressed, wrestling with the balance of family and professional life. Pressures and choices such as these are inevitably faced by women in cardiothoracic surgery, but there are other factors at play that must be considered even in this modern age.

In recent years, sexual harassment in the workplace has taken centre stage in our collective mindset. There is perhaps no better time to reflect on our own field and examine our attitudes toward women in

cardiothoracic surgery.

In my own personal experience, I would say that for most of the time at work there is no disparity between us as cardiothoracic surgeons, regardless of gender. However, if we were to take a more critical look at our interactions, we can identify those moments where we fall short of our ideal of equality.

Unfortunately, a double standard does exist. For example, men who are assertive are seen as confident, while women who are assertive are seen as overbearing. In addition, our personal appearance also serves as a double-edged sword; some use it to their advantage to advance, despite perhaps not being the most skilled clinician and, on the other hand, it sometimes attracts unwanted advances that are inappropriate in a professional setting. Furthermore, there are still the occasional chauvinists out there who view us with the subtle bigotry of lowered expectations.

This is not meant to be a warning against pursuing a career in cardiothoracic surgery. There are a great many other factors that deter people from pursuing the field: the



Dr Elena Sandoval (left) with article co-contributor Dr Maria Ascaso

amount of time invested, the acuity of the patients, the demands on your personal life. However, there are several reasons why many — including myself — have chosen to become cardiothoracic surgeons. I believe that by continuing to try to achieve a culture of equality and professionalism, we can enhance the appeal of our specialty to the Nina Braunwalds of the future.

The EACTS Training Management System (EACTS-TMS)

András Durkó

Erasmus Medical Center, Rotterdam, the Netherlands

For cardiothoracic surgeons in training, the operating room remains the main area to develop and practice their surgical skills. In addition, a modern surgeon is not only expected to be proficient in performing surgical procedures, but should also be an evidence-based clinician, a professional care taker, an outstanding teacher and a good team player.

In an era where pathologies are getting more complex, training programmes are becoming shorter and patient safety is subjected to closer scrutiny,



systematic and structured monitoring of the development of these skills are more important than ever. However, many European training programmes do not have, nor systematically

employ, appropriate tools for this purpose.

To fulfil these needs, EACTS created the Training Management System (TMS), a standardised, online tool for tracking and evaluating residents' progress, available free-of-charge for all EACTS members.

The TMS can be easily tailored to the needs of any training programme: it facilitates easy registration of procedures (the whole range of cardiac, vascular and thoracic procedures and procedural parts are covered), and also has several feedback functions including a built-in OSATS (Objective Structured Assessment of Technical Skills) platform, and forms for periodical

evaluations. Importantly, the system is fully confidential, and the local head of training will decide which functions of the TMS (procedure registering/evaluation) they prefer to use.

Like the training programmes found in other fields (e.g. aviation), portfolio systems are invaluable tools in facilitating optimal training. Since its launch in 2018, the TMS is now in use in 12 countries, and we hope to grow it even further in the future.

Interested in joining, or have any questions? Contact portfolio@eacts.co.uk to arrange a virtual tour of the TMS, and please visit the EACTS website: <https://www.eacts.org/educational-events/training-management-system/> for more information.

Residents

EACTS Residents at the German Society of Thoracic and Cardiovascular Surgery, Wiesbaden, February 2019

Alicja Zientara

on behalf of the EACTS
Residents Committee

In an effort to reach out to all European trainees, and inspire the next generation of cardiothoracic surgeons to engage in international collaboration and discussion about training systems, the EACTS Residents Committee has been busy visiting national society meetings throughout Europe.

The first visit was in February at the German Congress of Thoracic and Cardiovascular Surgery which, in cooperation with the Society for Pediatric Cardiology, took place for the first time in Wiesbaden, Hessen. The junior organisation of the German Society, Junges Forum (JF), organised a programme for young surgeons and students, starting with several training opportunities on the first day, and followed by the official meeting of the JF and a critical session about training systems in Europe. The JF belongs to one of the largest young national communities, with a registered membership base of over 200 young surgeons and students.

As Chair of the EACTS Residents Committee and a trainee herself, Miia Lehtinen from Finland was invited to provide an overview about the training system in her country, as well as the international cooperation that EACTS residents are engaged in across Europe. Further impressive and controversial talks were given



(Left to right). Can Gollmann-Tepeköylü (Innsbruck Medical University, Austria) Miia Lehtinen (University of Helsinki, Finland and Kymenlaakso Central Hospital, Kotka, Finland), Sven Helms (Herz- und Diabeteszentrum NRW, Bad Oeynhausen, Germany) and Alicja Zientara (Department of Cardiac Surgery, Triemli Hospital, Zurich, Switzerland).

by trainees from Switzerland and Russia, pointing out several educational difficulties that currently exist in their countries, including a paucity of training programmes.

One of the JF's successes in recent years has been the reduction of required operations to a consistent number of 100 cases for the cardiosurgical specialty. Previously this ranged from 100 to 200, depending on the German state in question.

Three days of resident sessions and active participation in the training village were featured. Apart from the traditional wetlabs and career-

focused workshops, a newly designed concept entitled 'Auf den Punkt gebracht' ('Put in a nutshell') – which was comparable to the Rapid Fire sessions at the EACTS Annual Meeting – reached a wide audience. Three-minute presentations were followed by an open-question round involving the moderators, speakers and the audience.

As is traditional since the founding of the JF in 2012 in Freiburg, the social party took place on Monday night in the Classical building Kurhaus Kollonaden, which continued until the morning light.

The resident workshops and the numerous awards supporting young scientists and inventors created a perfect platform for career-orientated meetings and training improvement. Once again, the German congress demonstrated that it is the ideal stage on which young surgeons and students can stand to build their formative experience in the scientific community, presenting and discussing their abstracts for the first time in front of a big audience. For our Residents, this visit was a truly inspirational and eye-opening way to learn about the training culture of our colleagues in Germany.

EBCTS

Apply now for the Level 1 (MEBCTS) examination. Application deadline is 31 May 2019.

Applications are also being accepted for the Level 2 (FEBCTS) examination to be held in December 2019.

All regulations and requirements for both levels of examination can be found at www.ebcts.org



Residents

EACTS Residents Committee in Portugal: The Portuguese Cardiac Surgery Residents Club

Rui J. Cerqueira President, CICC;
Member, EACTS Residents Committee

The Portuguese Cardiac Surgery Residents Club (CICC) organised the 'Informal Weekend 3' with the support of the Portuguese Society of Cardiothoracic and Vascular Surgery (SPCCTV). It was the third edition of this residents-focused meeting and was a great success. More than 40 attendees, almost all of whom were Portuguese residents, were gathered together in Penela, Portugal, to attend various scientific sessions and career development roundtables, with

the opportunity to discuss relevant topics with senior surgeons outside the formal environment of the hospital.

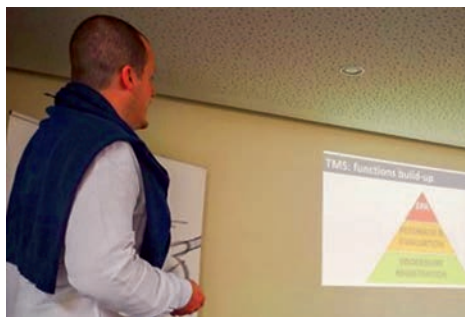
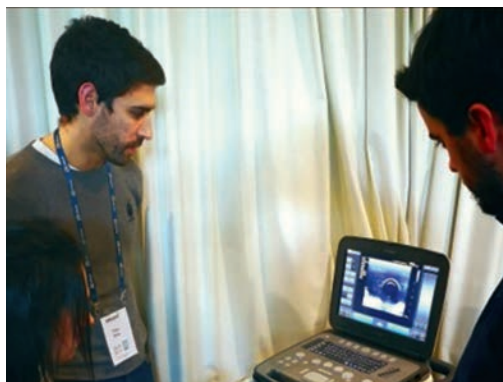
Hands-on sessions were well received, with young surgeons given the opportunity to perform implantation of left ventricular assist devices in the wetlab, as well as echo-guided percutaneous vascular access in a simulation course. Meanwhile, the winner of the clinical cases competition was awarded with a complimentary pass for an EACTS Academy course.

The current CICC directive board is working to bring Portuguese residents closer to EACTS and, this year, we were

very happy to have a representative from the Association in attendance. András Durkó, of the EACTS Residents Committee, was present to promote the activities of EACTS, with a special focus on the Training Management System.

We look forward to having more collaborations like this one, and we welcome all European residents and EACTS members to visit our website and join us for future events.

Head to the CICC (Clube Internos Cirurgia Cardíaca) website for more information: <http://www.clubeinternoscirurgiacardiaca.com>



Residents

Challenging your knowledge with the MEBCTS exam

Interviewee: Christoffer Stark

Department of Cardiac Surgery, Heart and Lung Center, Helsinki University Hospital, Finland

The Membership of the European Board of Cardiothoracic Surgery (MEBCTS) Level One examination tests an individual's scope of knowledge, clinical judgement and ability to apply the principles and practice of surgery to the standard expected at the end of national training in the generality of cardiothoracic surgery. Those who complete the exam can be reassured that they are ready to commence as an independent specialist.

After completing his exam, Christoffer Stark spoke to *EACTS News* to share his perspectives on the process.

Was it a long process to prepare yourself for the examination?

I've been involved in experimental and clinical cardiothoracic surgery since medical school. For me, the past 10 years have been a continuous learning process with the goal of obtaining my specialist degree, and I think it's more about becoming a good clinician than just preparing yourself for a single exam. The day before the examination, I enjoyed a nice dinner in Milan and had a good night's sleep. Preparing



took a long time, but I wouldn't say it was a hard process.

Did you need to take time off from clinical work to prepare for it?

I attended the EACTS Fundamentals in Cardiac Surgery courses in Windsor. They were very helpful and covered most of the syllabus. All other preparations were done alongside clinical work. We have an

educational programme for residents with weekly meetings at our hospital which aims to prepare residents for the MEBCTS Level One examination.

Did you feel that the exam tested relevant aspects of your specialty?

The exam consisted of both common and rare clinical cases, and was very challenging. I think it was a good way to test knowledge in a standardised fashion. You really had to stay focused and move on quickly because of the time limit. I was exhausted after answering the final question.

What benefit do you expect to get from taking the exam?

After passing the MEBCTS examination I did not have to take the Finnish national exam to qualify for my specialist degree. It is also personally rewarding to pass this difficult exam and realise that you actually know something!

Do you have any other comments about the exam?

I am very happy with the exam and would recommend it to all my junior colleagues as an alternative to the national cardiothoracic surgery examination.

More information can be found at [ebcts.org](https://www.ebcts.org).

Apply for the EACTS Residents Committee!

Miia Lehtinen

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

The Residents Committee is a voice inside EACTS speaking out to cardiothoracic surgical trainees across Europe. Our aim is to bring together residents from different countries, find ways to ensure equal training opportunities and identify potential issues in cardiothoracic surgery training in Europe. The Committee plans sessions for residents at each Annual Meeting, and has a representative in each of the EACTS Domains. The committee meets one to two times per year in Windsor, UK and at the Annual Meeting.

Right now, the EACTS Residents Committee has three open positions starting in October 2019. If you are interested in joining, please send your application including a CV and a motivation letter before 1 May 2019 via the EACTS website. All applications will be scored according to a pre-defined transparent scoring system rating the contents of the motivation letter, scientific contributions of the applicant, level of education, acquired scientific funding, previous organisational activity, and international and national awards that may have been obtained. Successful applicants will hold the position for three years.

Join us!

For more information and how to apply, head to: <https://www.eacts.org/resources/residents/>



The EACTS Academy



Introduction to Aortic Surgery

14–16 March 2019, Windsor, UK

Aimed at residents in their last year of training and surgeons wishing to broaden their expertise in major aortic valve and aortic pathologies, this year's highly interactive course covered the major aspects of aortic surgery, from the aortic valve to the descending aorta. Special attention was devoted to the various options for sparing the aortic valve and on modern approaches to aortic arch surgery.

In addition to the keynote presentations and live-in-a-box surgical cases, there were ample opportunities for the attendees to participate in practical training during the programme, including a wetlab on annulus enlargement and a thoracic endovascular aortic aneurysm repair (TEVAR) simulation session.

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Want to take part in the next course? Head to the EACTS user area to book your place.



The EACTS Academy

Minimally Invasive Techniques in Adult Cardiac Surgery (MITACS)

27–28 June 2019, Frankfurt, Germany

Focusing on the technical aspects of minimally invasive surgery, this year's MITACS course will provide an insight into the latest techniques and procedures. The programme will appeal to cardiothoracic surgeons, cardiologists, cardiac anaesthesiologists, perfusionists, residents and fellows interested in the field of minimally invasive surgery.

Over two days, the course will emphasise the success of the teamwork approach via interactive lectures, live-in-a-box video presentations and live case transmissions directly from the University of Frankfurt Hospital, Germany. Four specific subject areas will be addressed: aortic valve, the aorta, coronary surgery and atrioventricular valves (mitral and tricuspid).

Head to https://www.eacts.org/educational-events/programme/mitacs_2019/ to see this year's programme in full.

Make sure you don't miss out: book your place now via the EACTS user area!



Course Directors: Thomas Walther (Frankfurt, Germany), Volkmar Falk (Berlin, Germany) and Peyman Sardari Nia (Maastricht, the Netherlands)

The EACTS Academy

Fundamentals in Cardiac Surgery

The EACTS Fundamentals in Cardiac Surgery courses are designed to cover all of the basic aspects of cardiac surgery that a trainee would expect to be familiar with. Three courses are held over three separate weeks – February, June and October – at the EACTS Headquarters in Windsor, UK, and are designed to be aligned with the syllabus of the European Board of Cardiothoracic Surgery (<https://www.ebcts.org/syllabus/>).

Ideally, it is preferable that our attendees complete all three courses in the same year as the format may change slightly from year to year. There are places available for approximately 40 delegates on each course: they have proved extremely popular and do fill up quickly, so book early!

The first course of the series (Fundamentals I) took place in Windsor from 4–8 February this year and was a sell-out, with 43 participants from 17 countries in attendance. The programme covered all aspects of coronary artery surgery, aortic valve replacement and aortic root surgery. Experienced lecturers from all over the world presented a systematic overview of topics, using advanced teaching techniques.

On the second day of the course, hands-on training was

offered in two wetlabs, one focusing on coronary surgery – including harvesting of the internal mammary artery (IMA), arterial grafting and sequential grafting – and the other covering aortic valve replacement techniques. These sessions are always extremely popular with participants who are able to benefit from practical training under the supervision of our international faculty.

The dates for the remaining 2019 courses are as follows:

Fundamentals II: 3–7 June

Covering the essentials in aortic surgery, congenital cardiac surgery and the surgery of heart and lung failure, including mechanical circulatory support.

Fundamentals III:

21–25 October

Mitral and tricuspid valves, arrhythmia, endocarditis, hypertrophic obstructive cardiomyopathy, carcinoid and aortic root.

Both of the above courses will once again offer expert, hands-on wetlab training.

To secure your place on these popular courses, register now via the EACTS website at www.eacts.org/educationalevents/academy/



The EACTS Academy

The Thoracic Academy programme

The EACTS Thoracic Academy programme covers all of the basic aspects of thoracic surgery important for the aspiring trainee.

Spanning three parts, the programme focuses on different facets of thoracic surgery. The Thoracic Domain ran the first course in the series, Thoracic Surgery: Part I, on 4–6 April at the EACTS Headquarters in Windsor, UK.

In previous years, all three Thoracic Surgery courses have been held at the EACTS Headquarters, but this year the latter two will take place in other facilities in Europe. Thoracic Surgery: Part II will be held 5–7 September in Berlin, Germany, while Thoracic Surgery: Part III will take place in Porto, Portugal, from 28 to 30 November.

The first course of the series offered great 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. A hands-on drylab on bronchoscopy placement of double lumen tubes and bronchial blockers also featured.

Course two in September will cover the chest wall, mesothelioma, techniques for metastasectomy and tumours of the mediastinum. In addition, there will be an opportunity for practical training over two wetlabs on chest wall reconstruction, and energy and lasers in surgery.

The Part III programme in Porto in November will cover the topics of metastatic small-cell lung cancer (mSCLC), emphysema and tumours, thoracic trauma management, as well as a wetlab on carinal and superior vena cava resection.

Video-Assisted Thoracoscopic Surgery (VATS) Skills Course, Berlin, Germany, 16–17 May 2019

This specialist two-day course is aimed at thoracic surgeons training in a thoracic and/or cardiac department who have a specific

interest in VATS lobectomy. The Medizin im Grünen training facility is a medical centre of excellence located in Wendisch Rietz, just outside Berlin. Attendance will be limited to 12 participants, each of whom will receive intensive training in different patient simulations in an extremely modern operative environment. The training will cover topics including:

- Use of VATS staplers and energy systems
- VATS sleeve lobectomy
- Complications management
- Bronchoscopy double lumen intubation
- Broncho-mediastinoscopy

<https://www.eacts.org/educational-events/programme/vats-2019/>

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



(Left to right) The Thoracic Academy programme Course Directors: Eric Roessner, Michael Dusmet and Peter B. Licht



The EACTS Academy

EACTS Aortic Valve Repair Summit 2019

The world's largest meeting on aortic valve repair

Laurent de Kerchove and Gebrine El Khoury

On behalf of the AVRS Organising Committee

Dear Colleagues,
It is with great pleasure that we invite you to the fifth edition of the Aortic Valve Repair Summit (AVRS) to be held 20–21 June 2019 in Brussels, Belgium. Save this date in your diary – it is your chance to participate in the world's largest meeting on aortic valve repair ever. This year, the Summit returns to where it was inaugurated four years ago thanks to a collaborative effort between two pioneers in aortic valve repair, Professor Gebrine El Khoury and Professor Hans-Joachim Schäfers.

After the first two editions in Brussels, a third AVRS was held in Ottawa (led by Dr Munir Boodwani), Canada, followed by last year's meeting in Paris, France, which was organised by EACTS and led by Dr Emmanuel Lansac.

It was felt that due to the positive and widespread response to the initial three Summits, a larger meeting focused on aortic valve repair was necessary. Aortic valve



Laurent de Kerchove



Gebrine El Khoury

repair has established itself to such a degree in worldwide daily practice that more than 45 countries have participated in each edition of the Summit. Conscious of this fact, and in pursuit of its educational mission, last year, EACTS accepted not only to endorse the Summit, but also to integrate aortic valve repair into its well-structured educational programme. Indeed, this is a unique opportunity for surgeons who want to initiate such a programme themselves, or develop their skills.

Enriched by the collaboration of committed experts and EACTS, the AVRS has become a scientific meeting where all schools of thought are represented. As one would

expect, this generates two exciting days of intellectual challenges, fruitful debates and sharing of best practice. The Summit's roster of lectures, debates, abstract sessions, live surgeries and 'live-on-tapes' ensures there are plenty of learning opportunities available, with a rich programme that not only covers surgical treatment, but also assessment modalities, medical management and timing for surgery. The Summit is, therefore, an ideal opportunity for adult and congenital heart teams to digest the latest developments in these exciting fields.

Despite growing standardisation and the availability of efficient techniques for aortic valve repair, many

questions remain unsolved and debated. The AVRS is the forum where all of these questions will be placed front and centre of the discussion. If you want to actively participate in this exciting event, don't hesitate to prepare your best abstract and video.

Submissions are now open on the EACTS website, and please note that authors of abstracts submitted for presentation at the Summit are not precluded from also submitting at the 33rd EACTS Annual Meeting in Lisbon in October 2019.

We are very much looking forward to meeting you at the next Aortic Valve Repair Summit in Brussels!

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<https://www.eacts.org/educational-events/programme/2019avrsummit/>





EACTS
European Association For Cardio-Thoracic Surgery

Academy Training

Aorta Transplantation
Congenital 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**

29-30 April, Maastricht, The Netherlands

Video-Assisted Thoracoscopic Surgery (VATS)

16-17 May, Berlin, Germany

Fundamentals in Cardiac Surgery: Part II

3-7 June, Windsor, UK

EACTS Aortic Valve Repair Summit

20-21 June, Brussels, Belgium

**Minimally Invasive Techniques in
Adult Cardiac Surgery**

27-28 June, Frankfurt, Germany

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

2-3 September, Maastricht, The Netherlands

Thoracic Surgery: Part II

5-7 September, Berlin, Germany

**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

**4th EACTS Mechanical Circulatory Support
Summit**

7-9 November, Prague, Czech Republic

Congenital Heart Disease

12-15 November, Windsor, UK

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

22-24 November, Cancun, Mexico

Thoracic Surgery: Part III

28-30 November, Porto, Portugal

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

9-10 December, Maastricht, The Netherlands

For the full EACTS Academy calendar, visit www.eacts.org/educational-events

Raising Standards Through Education and Training

Annual Meeting

33rd EACTS Annual Meeting

Plans are progressing well for this year's Annual Meeting, which will take place 3–5 October in Lisbon, Portugal.

Lisbon, one of the most charismatic and vibrant cities in Europe, effortlessly blends traditional heritage with striking modernism and progressive thinking. Once again we will return to the Lisbon Congress Centre, close to the river Tagus and the historical and cultural heritage site of Belem.

The new three-day format of the Annual Meeting, introduced in Milan last year, was extremely popular with delegates, offering a mixture of general and special topic sessions, including the Techno-College. As such, we are delighted to repeat this format in 2019, showcasing a programme that will appeal to surgeons and allied healthcare professionals at every level of expertise.

2019 also marks the 500th anniversary of the death of Leonardo da Vinci, and EACTS will be celebrating the life and achievements of the original *Renaissance man* throughout this year's Annual Meeting with keynote lectures and a special exhibition.

Here is a taster of some of the sessions planned throughout the week:

- The team is the key
- Help! Trainee in trouble
- Visualising the heart – future aspects
- The difficult choice of prosthetic valve in the 21st century
- Heart failure surgery at the cutting edge
- A further step ahead: minimally invasive and hybrid CABG



Belem tower

- Heart transplantation in 2019
 - The developing and changing field of surgical and hybrid treatment of atrial fibrillation
 - Stroke in TAVI: Prediction, prevention and treatment
 - Physiology for the cardiac surgeon
 - Technical pearls in mitral valve repair: artificial chordae adjustment
 - Innovations (EMB, localisation)
 - Oesophageal (resection + complications)
 - Lung failure, ECMO, pulmonary hypertension
 - Advancements in thoracic oncology (how new oncology influences surgery)
 - TB and friends
 - Thoracoabdominal aortic disease – patient tailored approaches
 - MMCTS video cases — challenging aortic cases
 - Cerebral protection in aortic arch treatment
 - “Here we go again!” — Strategies in re-do thoracic aortic surgery
 - EACTS-STs: Acute type A aortic dissection: can we bring mortality down to single digits?
- Complementing our vibrant scientific programme, we will also be holding a large trade exhibition and a programme of satellite symposia.
-
- For more information, and to participate in all of these activities, please visit our website: <https://www.eacts.org/annual-meeting/>.**



Snapshots from Milan...



Annual Meeting

EACTS Nurses and Allied Health Professionals Day – 5 October 2019

Tara Bartley on behalf of the EACTS Allied Health Professionals Organising Committee

We are very much looking forward to this year's EACTS Annual Meeting in Lisbon, Portugal. It is a unique opportunity for nurses and allied health professionals to come together to network and share how learning and innovation across European centres impacts patient care. We welcome abstracts from nurses, surgical care practitioners, physiotherapists, pharmacists, operating department practitioners, surgeon's assistants and other allied health professionals.

At last year's Annual Meeting in Milan, the Nurses and Allied Health Professionals Day focused on the impact of enhanced recovery after surgery (ERAS) programmes on both patient experience and the flow of patients through the units. We also looked at clinical aspects such as the management of postoperative pain, wound management and mobilisation, and we focused on the challenges faced by different roles, for instance the surgical care practitioner. Moreover, the programme encompassed cardiac and thoracic patient topics selected from the abstracts submitted.

After the success of the Milan meeting, plans are underway to deliver another stimulating Nurses and Allied Health Professionals Day on Saturday 5 October 2019 in Lisbon. To that end, we invite colleagues to submit abstracts of work they would like to share.

This is an excellent opportunity to present to colleagues across Europe. Not only do we enjoy celebrating achievements that showcase the outstanding contribution that nurses and allied health professionals make to the multidisciplinary team providing positive patient care, but presenters can use these achievements to develop their careers. In the current



Gathering at last year's Annual Meeting in Milan

“This year, we would like to celebrate excellence and team working, with plenary sessions highlighting how to capitalise on this notion.”

Tara Bartley

climate, education and research are paramount to healthcare professionals. The EACTS Nurses and Allied Health

Professionals Day is the ideal opportunity to present and also to learn about best practice.

This year, we would like to celebrate excellence and team working, with plenary sessions highlighting how to capitalise on this notion, both in practice and in education. We hope to run a wetlab, which will provide an opportunity for a close examination of anatomy, physiology and pathophysiology, and workshops that take you through aspects of diagnostics. Our plenary sessions will echo this approach to the delivery of care.

To submit your abstract, head to: <https://www.eacts.org/annual-meeting/education-meeting/alliedhealth/>. Abstract submission closes 31 July 2019.



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EACTS
European Association For Cardio-Thoracic Surgery

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

Exploring New Frontiers of Science

Deadline for Abstracts - 30 April 2019

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

www.eacts.org

Raising Standards through Education and Training