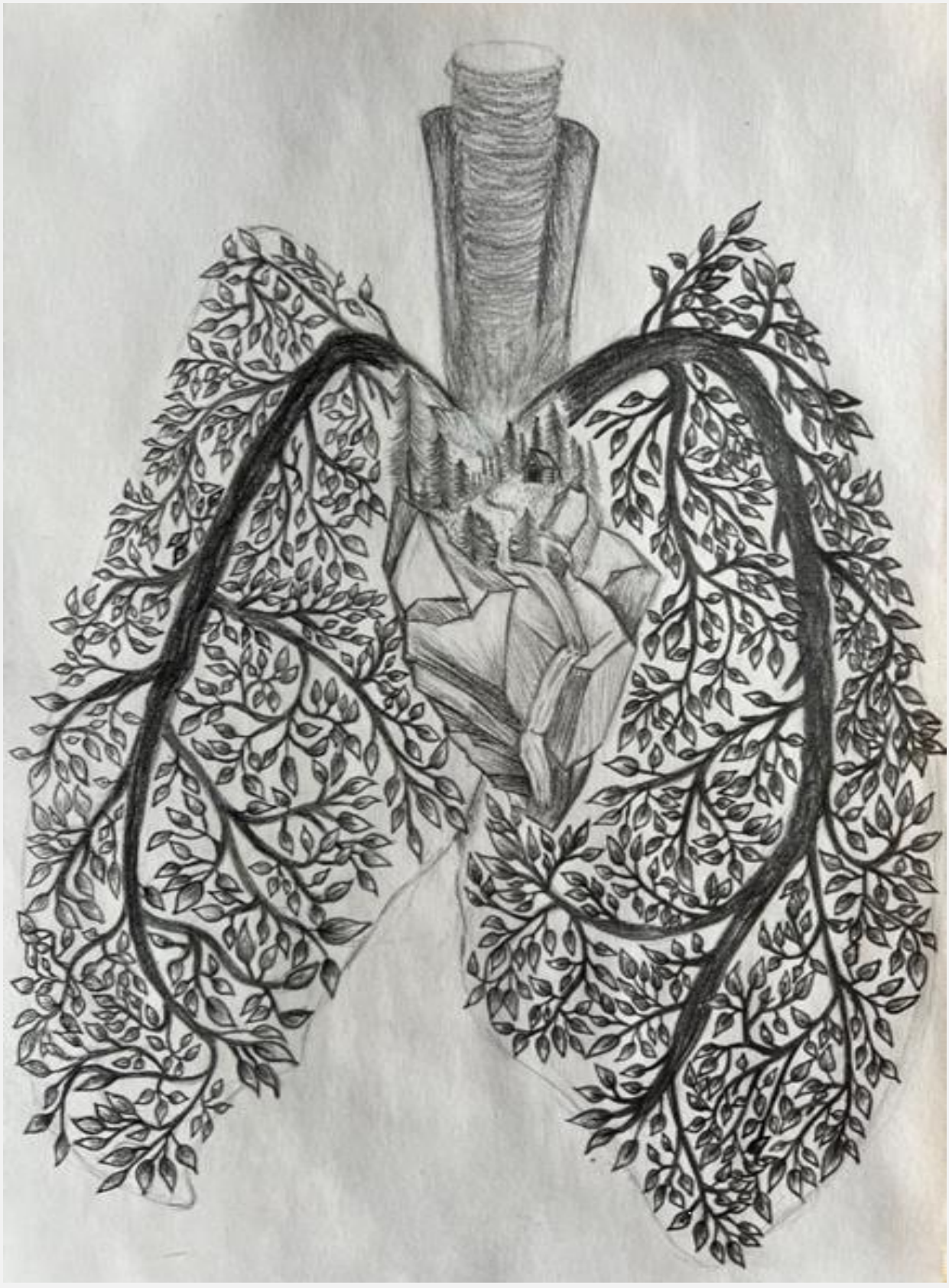
From the Chest



Inaugural Issue

April 2023

From the Chest

"Communication is the life blood of an Organisation"-Asa Dan Brown.

SCTS values communicating with the membership in a timely and useful manner is of paramount importance. The Biannual Bulletin showcases what is happening in the specialty and has grown from strength to strength with the recent January issue being one the largest. With the advent of social media the SCTS informs the members with posts in Linked in, Facebook, Instagram and Twitter. We have streamlined our electronic communication by the now popular Weekly newsletter. But there is still scope to share various aspects of our members lives particularly with us focussing on wellbeing and work-life balance of our multidisciplinary teams.

'From the Chest' a monthly monologue aims to bring to you, unit heritage, members' passions and achievements, as well as non-scientific articles addressing topical issues in the specialty. Our specialty has progressed so much in the last few decades; Each unit has a story to tell and showcase the doyens who by sheer determination and skills made cardiothoracic surgery what it is now. We hope to have the history and legacy of all the units (existing and closed) so that there is repository of our heritage. This issue focuses on the **Liverpool Heart and Chest Hospital** and the great surgeons who worked there.

Each of our committees deliver on our visions and strategies and the various chairs deliver that over and above their busy clinical practice. Aman Coonar, the outgoing Thoracic Sub-Committee Chair and President Elect shares his thoughts on leading that vibrant Thoracic subcommittee.

The Escapist Club was a concept created by Prof Hugoe Mathews, Past President of SCTS who created the concept of surgeons sharing their non-surgical passions. We resuscitate that concept, when work life balance and wellbeing are the most important challenges for our generation due to the burn-out. We all need something to offer us resilience. **Jonathan Unsworth-White** shares his passion on sailing to start this series and we welcome members to share their stories.

The SCTS uses all forms of tools to make our members lives better both with skills progression as well as wellbeing. The annual meeting will have **virtual reality simulators** both for mindfulness and CALS training for the first time in addition to a Mindfulness and Wellbeing station.

The Belfry club is formed by UK cardiothoracic Consultants appointed between 2005-2012 and Prof Ira Goldsmith shares the journey of the Belfry Club over the years in this issue.

Finally SCTS is governed by its constitution as a registered Charity, as you are all aware we have sought members opinion on **changes to the constitution** and Rana Sayeed our Honorary Secretary summarises the proposals and reasoning behind the changes.

Mara Banuta, our education administrator and artist has created her impression of the chest in the **cover art**, and we welcome member contribution in the art forms or photography.

This is a new venture, and we will value your feedback and contributions to make this better. As always help us to serve you better from the Communications team.

Sridhar Rathinam *SCTS Communication Secretary*

A History of Liverpool Cardiothoracic Surgery

Richard Page, Consultant Thoracic Surgeon Liverpool Heart and Chest Hospital and Past President SCTS.

The Hospitals

Liverpool Heart and Chest Hospital (LHCH) NHS Foundation Trust is a single specialty facility, and provides principally tertiary cardiac and thoracic medical and surgical care for the patients living in Merseyside, parts of Lancashire and Cheshire, North Wales, and the Isle of Man. The surgical service comprises eight operating theatres, separate cardiac and thoracic wards and a 35-bedded cardiothoracic surgical critical care area. At the time of writing there are 22 surgeons employed by the hospital in the subspecialties of cardiac, aortic, and thoracic surgery.

LHCH is in the Liverpool suburb of Broadgreen where a large hospital has been in existence since the 19th century, originally as a workhouse, then a TB sanitorium and latterly as a district general hospital. Broadgreen hospital was the location chosen for the amalgamation of the region's previously disparate Cardiothoracic Surgery. This occurred formally in 1963 with the opening of two dedicated cardiac surgery operating theatres.

Prior to 1963 thoracic surgery had been performed to a greater or lesser extent in all the hospitals in Northwest England and North Wales, especially the large TB sanitoria for which thoracic surgery had an important role to play in the early part of the 20th century. With the introduction of antibiotics, blood transfusion and safer anaesthesia and post-op care it became clear that a reorganisation was required, and this led to the centralisation of the majority of thoracic surgical services at Broadgreen. Some thoracic surgery was also carried out by thoracic surgeons who travelled to the region's hospitals but gradually these services ceased, as it became clear that a higher quality service could be provided on the Broadgreen site. The last outreach thoracic surgical operations took place up until 2003, on a fortnightly list I carried out on the Isle of Man.

Meanwhile specialists working on Merseyside including thoracic surgeons began to see the potential for the surgical treatment for children with congenital cardiac conditions. The Royal Liverpool Children's Hospital was located at Myrtle Street in the city centre, and it was here that plans were made for the development of cardiac surgery. The first open heart operation was carried out in 1949 at Myrtle Street on a 6-year-old child with an ASD using hypothermia rather than cardiopulmonary by-pass. The patient survived the operation and is still in good health over 70 years later. At the same time cardiac surgery was being introduced for adult patients, at Mossley Hill Hospital which coincidentally is near to the suburb of Broadgreen. This service was also moved to Broadgreen Hospital with the amalgamation of thoracic surgical services in 1963.

Specialisation was also taking place in hospital medicine. In Merseyside cardiology had been consolidated over many years at Sefton General Hospital. Given the increasing need for invasive cardiac investigations for patients and the advantages of co-location on the same geographical site as cardiac surgery, the Sefton cardiology service move to Broadgreen in 1981, with the creation of the Liverpool Regional Adult Cardiothoracic Unit also known by the somewhat unwieldy abbreviation RACTU. Not surprisingly everyone still called it Broadgreen.

Children's cardiac surgery continued at Myrtle Street until the 1980s when the hospital closed, and the services were moved to Alder Hey Hospital. The final reorganisation was in 1991 when the large thoracic surgical service at Fazakerley Hospital in the north of the city moved to the Broadgreen site. This coincided with the separation of the Broadgreen cardiothoracic department from the rest of the hospital into an independent NHS Trust, in the first wave of Trusts coming into existence as part of a national political reorganisation of the NHS being introduced at this time. Soon afterwards the A&E department at Broadgreen closed. These two events meant that cardiothoracic services in the region could move forward with a single-minded direction and strategy and with much less need to compete with other secondary and tertiary hospital specialities.

The resulting name of the new Trust was "The Cardiothoracic Centre - Liverpool" and apart from the use of its acronym "CTC", this description was never popular, and it often proved difficult to pronounce for patients and NHS staff in Merseyside and neighbouring areas. When the Trust achieved NHS Foundation status in 2009, very sensibly the name was changed to Liverpool Heart and Chest Hospital – which has proved to be much more manageable. But despite and perhaps because of all these political events the hospital is still referred to as Broadgreen by patients, especially those who have lived on Merseyside for many years.

So much for the hospitals. But what about the surgeons who worked through this time? What were their backgrounds and what were their roles in what must have been a challenging albeit exciting and ultimately rewarding journey?

Hugh Morriston-Davies (1879-1965)

Many acknowledge that Hugh Morriston-Davies (HMD) is most deserving of the title of the father of thoracic surgery in the UK.

HMD was born at Huntingdon in Cambridgeshire. His undergraduate education was at Trinity College Cambridge and at University College in London. He was appointed to the surgical staff at UCL in 1908 and decided to devote particular attention to diseases of the chest. He corresponded with and visited Sauerbrach in Germany and both surgeons showed that it was possible to carry out open operations within the thorax in a negative pressure chamber. Prior to the invention of endotracheal intubation this was the only way of managing the otherwise fatal consequence of the pneumothorax which occurred after when a surgeon made a large opening in the pleural cavity. HMD took this concept further by administering ether anaesthesia at positive pressure via a face mask, which avoided the cumbersome necessity of the surgeon operating in closed-box isolation. He also started research at the hospital into the use of chest radiography when hardly anyone else in the country had appreciated its value. In a neighbouring room Thomas Lewis was studying electrocardiography and it seems likely that both pioneers met with considerable resistance from the medical establishment of the era.

In 1912 a patient suffering from suspected bronchitis was sent to HMD for an opinion. The chest radiograph showed a shadow in the right lower lobe which he diagnosed correctly as a lung cancer. He went on to carry out a resection of the lobe with positive pressure chloroform anaesthesia administered via an uncuffed tube in the trachea, with individual dissection and ligation of the hilar structures. It is recognised that this was the first lobectomy carried out anywhere in the world for a lung cancer, a procedure not repeated until 1930. He also pioneered resections for bronchiectasis and tuberculosis and introduced the operations of adhesiolysis and thoracoplasty for pleuro-pulmonary sepsis.

Still in only his mid-thirties HMD was acknowledged as a national and international leader in the developing speciality of thoracic surgery. But in 1916 whilst working at the London Chest Hospital an incident occurred which would change HMD's life permanently. He operated on a patient with an empyema and when closing the chest, he cut his right hand on a sliver of glass accidentally contained in a length of catgut suture. Over the next few days his hand and arm became swollen due to suppuration. Amputation was considered but was avoided by incision and drainage of the hand and forearm. Although he recovered from what could easily have been a fatal illness his dominant hand was rendered almost useless due to rigid flexion deformities that the scarring from the infection had caused.

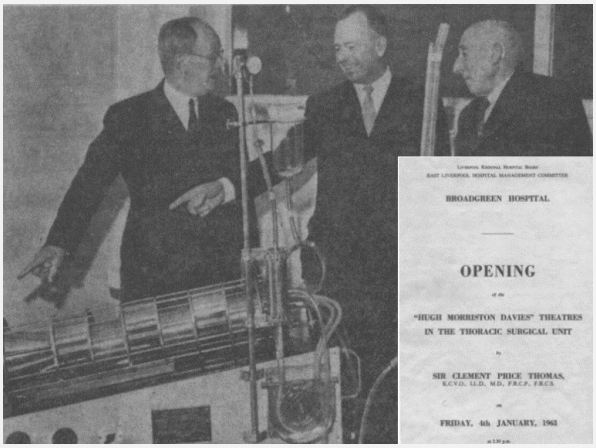
As a result of this accident, HMD believed his career as a surgeon was over. In 1918 he learned that Llanbedr Hall, a TB sanatorium in Ruthin, North Wales was for sale, and he decided to start a new career as superintendent to the institution, which he eventually purchased. Over the next three years he saw the opportunities to help his patients with the surgery he had pioneered over the previous decade in London. He gradually taught himself to operate left-handed, and as a result in 1921 was able to resume his career as a surgeon. He took on consulting thoracic surgical duties in all the Welsh hospitals as well as many of those in Cheshire, Merseyside, Lancashire and Cumbria. Throughout all this time he maintained a steady stream of academic publications on his experience of the still fledgling surgical specialty. He was one of the founder members of the UK Society of Thoracic Surgeons (the original SCTS) and became its first President in 1934.

At the outbreak of World War II, he provided leadership in Northwest England and North Wales in caring for patients with military and civilian chest injuries. This led directly to the gradual centralisation of thoracic surgical services ultimately based at Broadgreen Hospital. He was the director of this service from its inception until his retirement in the 1959.

F Ronald Edwards (1910-1983)

Ronald Edwards (FRE) was born in Chester and graduated from Liverpool Medical School in 1932 and obtained the FRCS in 1934. He completed surgical training on Merseyside during which time he worked with Morriston Davies and decided to specialise in thoracic surgery. He helped set up the regional thoracic service at Broadgreen and the paediatric cardiac service at Myrtle Street. He made major contributions to the development of surgery for tuberculosis, bronchiectasis, lung and oesophageal cancer and congenital heart disease. As well as having a busy clinical practice he had an impressive academic and professional workload. He was director of thoracic studies at Liverpool University, a Hunterian Fellow of the English Surgical College on two occasions, Chairman of the Eastern district of the Liverpool Health Authority, President of the British Thoracic Society in 1967, and President of the SCTS in 1972.

His professional reputation was that of a master surgeon in theatre, being dextrous, expeditious, dignified, and quiet. He was loved by the hundreds of staff he trained and worked with and his cheery "Thank you all" as he left theatre was much appreciated by medical and nursing staff alike until his retirement in 1975



The photograph shows the opening of the dedicated cardiothoracic surgical theatres at Broadgreen in 1963. HMD is on the right with Sir Clement Price-Thomas on the left and FRE in the centre

Leslie Temple (1915-2004)

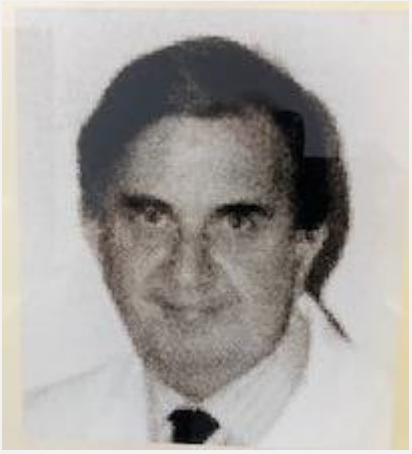
Leslie Temple was born in London and studied medicine at UCL. His surgical training was interrupted by WWII when he served with the RAMC from 1941 until 1947, with postings to France and Belgium and later in India at the time of the establishment of independence. His experiences as a war surgeon no doubt led his rapid appointment as consultant thoracic surgeon to Broadgreen Hospital in 1949 at the age of only 34. As well as making major contributions to thoracic surgery he pioneered paediatric but most especially adult cardiac surgery. He went on to lead the development of cardiac surgery in the Northwest over a long consultant career until his retirement in 1978.

I met Leslie on one occasion, when I sat next to him at a retirement dinner for one of my colleagues. It was inspiring to hear his anecdotes of his various professional experiences, especially his description of being one of the first doctors on the Normandy beaches at the time of the D-Day invasion. He immediately established a field hospital in one of the recently vacated German machine gun bunkers and any of us who have seen the film Saving Private Ryan can only imagine what the conditions must have been like. He also described the problems of caring for patients during and after cardiac surgery in the 1950s, when things we take for granted now (such as accurate observations of blood pressure,

ECG, potassium, blood gases etc) were only available “when necessary”! He also described a remarkable procedure he carried out on a patient with aortic coarctation. The standard procedure at the time was to resect the narrowed segment and carry out an end-to-end anastomosis. Leslie described being unable to approximate the (clamped) ends of the aorta, despite full mobilisation. He was aware of the development of Dacron by DeBakey in the USA, but the grafts were not available in England at this time. But he told me that he had just bought a shirt made of a new material called Terylene which was hanging in his locker. He asked one of the theatre staff to get the shirt, cut off the arm, put it in the autoclave and give it to him at the operating table. He went on to construct a tubular graft from his shirt sleeve and implant it in the patient, following which the patient made a full and uneventful recovery. Pioneering work indeed!

Tales from the archives such as these are illustrative of not only what surgery was like at the time but also of what surgeons such as Leslie Temple and his colleagues must have had to fight through to enable the care of their patients to proceed and develop.

James Benedict Meade

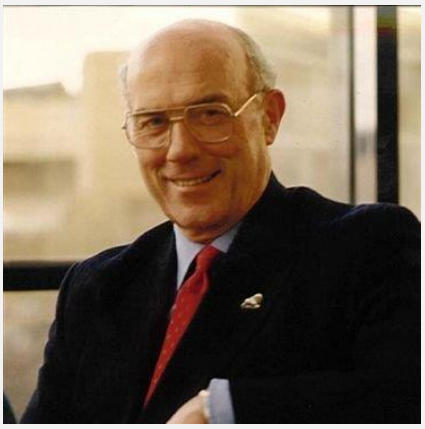


Ben Meade was born in Ireland and trained in cardiothoracic surgery there and in London. He completed his training as senior registrar in Liverpool. He was appointed to Broadgreen as a consultant cardiothoracic surgeon in 1970, and rapidly went on to lead and develop adult cardiac surgery in the hospital. He performed the first coronary artery by-pass operation in Liverpool in 1972 using saphenous vein and the first internal mammary artery graft in 1974.

As well as a being highly gifted surgeon he was a superb medical leader and politician. In trying to develop coronary artery surgery at Broadgreen (for which he was the only active surgeon until 1985) the service was severely limited by the need for patients to have coronary angiography and other invasive cardiac investigations at Sefton Hospital. Those patients suitable for surgery were transferred for their operations at the Broadgreen Chest Unit and then proceeded to Mossley Hill Hospital or back to Sefton for convalescence, clearly a frustratingly poor service for patients and the source of many difficulties for the teams caring for them. Along with many other medical and surgical colleagues Ben was instrumental in achieving the consolidation of specialist medical and surgical cardiac services on the Broadgreen site in 1981.

Throughout the whole of his career, he remained actively involved in the challenging and turbulent NHS reorganisations of the 1970s and 1980s and Ben can take the lion’s share of the credit for creating the LHCH specialist cardiothoracic hospital on the Broadgreen site, as one of the first NHS Trusts in 1991. He was both chief executive and medical director of the new institution when there was significant hostility to such specialisation from the rest of the Merseyside medical community. Despite this the success of the LHCH is directly due to his careful and wise leadership at the time of its inception. He retired in 1993.

Raymund J Donnelly, MBE (1936-)



Professor Ray Donnelly was born in Glasgow and graduated from St Mary's Medical School, London in 1961. He post-graduate training was in Leeds, and he was appointed to Broadgreen and Myrtle Street hospitals as a thoracic and paediatric cardiac surgeon in 1975. He was a master technician very much in the mould of Ronald Edwards whom he replaced. From 1979 he devoted himself entirely to thoracic surgery until his retirement from clinical practice in 1998. During this time, he developed many innovative techniques and pioneered the safe use of surgical staplers in pulmonary and most especially oesophageal surgery. He was a world leader in surgery for oesophageal cancer and was instrumental in leading the trials of neoadjuvant chemotherapy which as a direct result of his work has become standard practice for the condition. He was also one of a small group of UK thoracic surgeons who led the way in minimally invasive techniques and helped to establish the operations which are now part of standard thoracic surgical practice.

But it is his work in establishing the Roy Castle Lung Cancer Foundation that is perhaps Ray's greatest achievement. Back in the 1990s lung cancer therapy was surrounded by nihilism and there was almost no dedicated research to try and improve outcomes for patients. For this reason, Ray (with the assistance of only his medical secretary and a former patient) formed the Lung Cancer Fund, to support patients who had developed the disease and to stimulate research into lung cancer. Rapid exponential progress was made especially with the input of the entertainer Roy Castle whose name was used for the name of the charity soon after its formation. The Foundation acquired its own premises on the University site in 1998 and has carried out ground-breaking research in many aspects of lung cancer particularly in its epidemiology. This research has assisted with the design of many of the lung cancer clinical screening programmes currently available for patients in many parts of the world. Ray can take full credit for this and because of his efforts he will have helped many more patients with lung cancer than he could have possibly done in his clinical practice as a thoracic surgeon.

Many other surgeons have dedicated their lives to cardiothoracic surgery in Liverpool and all have contributed so much to the care of their patients. Unfortunately, space does not permit me to specifically pay tribute to them individually. But as a medical student, surgical trainee and for almost thirty years a consultant surgeon at the Broadgreen Unit, I would like to thank them all, on behalf of all my colleagues and the patients who have benefited from a hospital I am so proud of. Despite all the problems currently in the NHS, the future of LHCH as a one of the very few standalone cardiothoracic specialty hospitals in the UK looks bright.

Thoracic Surgery Committee 2021-2023

I was asked to write about my two years as SCTS thoracic surgery committee chair. Where to start?

It seems as if I started yesterday! The president asked if I would take it on? It was January 2021, COVID was rife, and we were still getting used to online meetings.

Jump forward.... looking back on the last two years. My strongest feelings are of massively enjoying it. I met loads of new people and got to know others better. I saw the thoracic surgery community coming together, stronger and kinder. That's got to be good for patients and professionals.

Let me really start by thanking all the amazing and fantastic committee members who made the time and space for this work on top of their busy lives. Thank you for your wisdom, experience and for putting up with my requests. All our outputs: published, in process or discretely unnamed, are because of your time and effort. What a great team. Thank you!

What about the other arm? The Thoracic Forum, that proudly independent band of thoracic surgeons who in our informal and unregulated WhatsApp chat and other gatherings have counselled, teased, helped, cajoled, stimulated and guided. What a great crowd. We are so much better for that, and I'm looking forward to our meeting in Belfast.

So here are some of the things that the SCTS Thoracic Surgery did or are ongoing.

- High level thoracic surgery workforce report.
- Bid for themed thoracic surgery training which resulted in the ST4 thoracic recruitment programme.
- LVR engagement, guideline development and national rollout.
- LVR MDT proforma development and release.
- Thoracic surgery survey and unit characteristics report. The workforce report is ongoing.
- Guidance on thoracic surgery job-planning.
- Guidance on elective operating after COVID infection.
- Supporting the National Consultant Information Programme (NCIP).
- Developing clinical pathways on airway obstruction and pneumothorax for NICE/GIRFT
- Royal College consultant job plan reviews and sitting on interview committees.
- Sitting on advisory groups for robotics and cancer.
- Supporting units and colleagues in difficulty.
- Supporting the thoracic surgery research projects in particular the VIOLET and MERITS studies.
- Working with the British Thoracic Society (BTS) and the Association of Cardiothoracic Anaesthesia and Critical Care (ACTACC) and other societies.

And much more....

We decided to increase representation. So, in recruiting new people we asked for members who were doing mixed practice (some thoracic surgery is still done by them) and those who working in each of the SCTS nations instead of just England. We also saw robotics as a key part of the future and appointed robotic surgeons. We increased our Allied Health Professionals and have now have representation from nurses and physiotherapy. Thus, now all 5 nations have their voice; and we have a greater proportion of women.

Looking to the future, we need to excite and engage with trainees. So, we called for and set up a thoracic surgery trainee group, who in turn set up a network for communication, support and engagement. They have run successful webinars and have just interviewed for their successors.

Important to me is work-life balance and a dislike of long meetings. One of our first actions was to move the meeting into a surgeon's working day and reduce it to an hour. Rightly or wrongly, it was too early for some, so we had a vote and accepted the democratic decision of moving it a little later. I will keep pushing for an earlier finish!

In this role I have learnt so much and have been fortunate in having SCTS president Simon Kendall as my co-chair. A special thank you for your mentorship and showing me how to be a better listener.

There are many jobs still to do. We are working hard to deal with the suffering of Pectus patients and their families. We are liaising with the NHS, patients and other stakeholders to sort this out, such that all our Pectus patients can receive the type of Pectus Care that has become available in Scotland. To me advocacy is very important in our work, as is insisting that clinicians guide and develop healthcare pathways - not the other way round!

Moving forward, I am both excited and intrigued to see how the story of thoracic surgery evolves. What a great and exciting time with new technologies, increase in work from lung cancer screening and lung volume reduction and new styles of working.

Good luck to the successors. Lean in and enjoy it.

Thanks for having me!

Aman S Coonar
Chair,Thoracic Subcommittee 2021-2023 & President Elect 2023-25

Surgeon and the Sea

Jonathan Unsworth-White *Sailer & Consultant Cardiac Surgeon Plymouth*

I have salt in the blood. And I'm not talking 140mmol/l of sodium ions either. Nope, I was born with seawater flowing through my veins and this has shaped my destiny. I can trace seafaring a good way back in my family. A forebear was master of an Essex coastal barge trading between London and the Rhine. He sadly foundered, aged 47, father of 4, off the Dutch coast in 1895, casting a forlorn message-in-a-bottle into the storm ("Barge Cynthia. We are sinking: Rudder head gone, boat, hatches. We are off the Wielingen *{offshore between Zeebrugge and Vlissingen, entrance to Westerschelde}*. Have had distress signal flying all day. Farewell to all we love. Captain Gentry *{my forebear}* Maldon, Carrington *{the mate}* Mistley, Brown *{the boy}* London. Should this be picked up, please send on to……."). The bottle was found just days later, on the shore at Dunkirk.

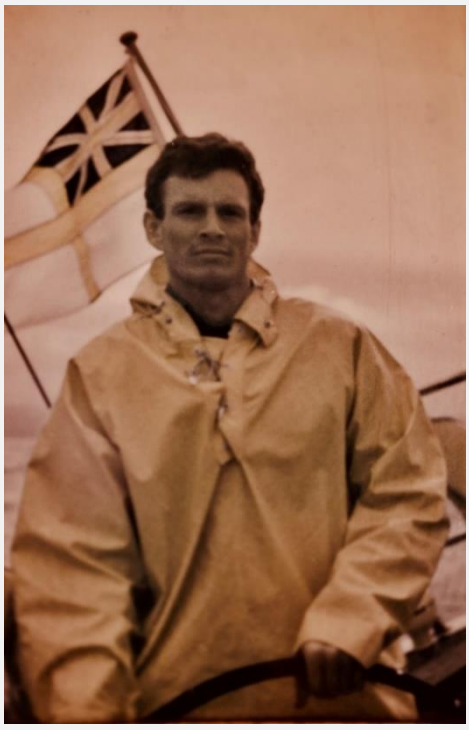
My grandfather was a captain in the Royal Navy, sunk twice (is there a theme here?!), once in each of the World wars. My father joined Britannia, the Royal Naval college in Dartmouth, aged 13, emerging some years later a fully fledged midshipman. He later went on to fly helicopters for the navy and "ditched" twice – the theme continues, hmmmmmm.

I was Christened in the up-turned bell of HMS London. My first memory is of being in a sail bag, wrapped up against the cold, at the bottom of a naval bosun dinghy, being sailed by my father, across Portland harbour, where he was stationed at the time. Also on board will have been my mother, previously a WREN officer herself, my two older sisters and perhaps even my baby brother.

Throughout my childhood, holidays were on the water, usually in our home-built mirror dinghy. Home, too, was on the coast, commuting distance from either the Portland (HMS Osprey) or Fareham (HMS Daedalus) helicopter bases. When dad was posted to a NATO base in Oberammergau, Bavaria, I joined the ranks of 100 other 11-year-old "New Jacks" at The Royal Hospital School, the naval boarding school, on the river Stour, just south of Ipswich. I was soon sailing there too and left the school 7 years later as "Captain of Sailing". By then, I knew I wanted to be a surgeon (I had known that since the age of four) but I was equally certain that I had to have a boat one day too.

So I was a fish out of water as I began what was to be 17 years in London, firstly as a medical student at The Middlesex Hospital Medical School then as a surgical trainee on the West London Rotation. But a spark had been ignited. The father of a fellow intercalating medical student was looking for crew to take his family boat from Guernsey to Scotland. The following year I joined his crew again, this time in his brand-new boat, to participate in the famous Cowes week regatta before heading off on the 1987 Fastnet Race.

Many years down the track and I have sailed more than 20,000 miles in my own boat. I am a qualified RYA Yachtmaster-Offshore, and the very proud father of two daughters who now have their own sailing qualifications and are confident to take the boat with their friends on their own adventures.



It was no accident, therefore, that I took a consultant post in what was then a newly opened cardiothoracic unit in Plymouth. I couldn't believe my luck when Derriford opened her doors during my final year of training. The previous year a consultant trainer in London had asked me "….so, Jonathan, which hospital in London are you applying to join?" When I replied that I had no intention whatsoever of remaining in London he looked at me as if I was stark raving bonkers! I was soon hoisting spinnakers during Wednesday evening racing with the Royal Western Yacht Club in Plymouth Sound - a great incentive to get a wriggle on in theatres, finishing in time to make the start line.


Fellow examiners! "R and R" Plymouth October 16

What is it about sailing and cardiac surgery? Well, I am not alone in combining the two – although I may have been the first to coax fellow examiners on board in their suits and ties for a quick trip around The Sound, straight after the Plymouth part III examination, while they awaited their trains home!

For me it is the ultimate mental relaxation. I spend as much time thinking about a forthcoming trip, the weather, the sea state, the navigation, the victuals, the various safety aspects, as I do on the trip itself. Prior Preparation Prevents ****-poor Performance after all! It is not just the time afloat; it is also about the time thinking about being afloat. I similarly think long and hard about an up-coming tricky operation and enjoy re-playing aspects of the subsequent day's work in my mind that evening. It is like going back over a really good movie, or recalling an amazing beam reach with dolphins accompanying me back across the Channel.

We know well the cross references between the airline industry and our own. I think the same can be said of sailing and surgery. Safety briefs, equipment checks, leadership, mentoring, education, pastoral care, honest post-trip reviews with potential lessons for next time! But sailing has also given me a broad-based common ground with so many of my patients: A loud banging on my boat's hull whilst moored in Mevagissy's tiny harbour was followed by "……'ere Unswerrth……..the lobsters I promised you…..". I'd emergently replaced this hulk of a man's ascending aorta a year previously. We had shared yarns of the sea during his convalescence and he had told me of his daily grind to haul up lobsters from the rough seas off the rocky coastline there. It reminded me of the Brixham trawlerman who brought a noisy box containing a wriggling lobster to his follow-up appointment with me in outpatients a few years still further back!


JUW Mid Channel 2022 (Mrs U-W a mile to port aboard the Roscoff to Plymouth ferry!).

As I head rapidly towards retirement later this year, I am looking forwards to more time with Sarah and more time afloat. The two are not entirely overlapping but we shall no doubt reach a happy compromise somewhere with warm water and lots of sunshine! I would finish by encouraging readers to make time for their hobbies – whatever they might be. Cardiothoracic surgery is hugely demanding of our thoughts, but we must make space for other things too – most importantly our families and friends, but also our diversions. Ultimately they keep us sane, which has to be good not only for us, but also for our families, our work colleagues and, of course, our patients.

The Belfry Cardiothoracic Club

Diary of Professor Ira Goldsmith

The concept: In the late noughties a few of us recently appointed cardiac and thoracic surgeons had been talking about forming a club where we could meet up, in a family friendly environment, on a yearly basis and spend some quality social time together. Top on the list was to hold the club meeting whilst attending the SCTS annual meeting, after the Scientific Sessions, in the evenings. A second more appealing suggestion was to arrange a full day meeting in a country house and spa and invite family members too. A great opportunity to meet up with colleagues and deliberate on current issues we face at our work, and later in the evening meet with our families for some quality time together.

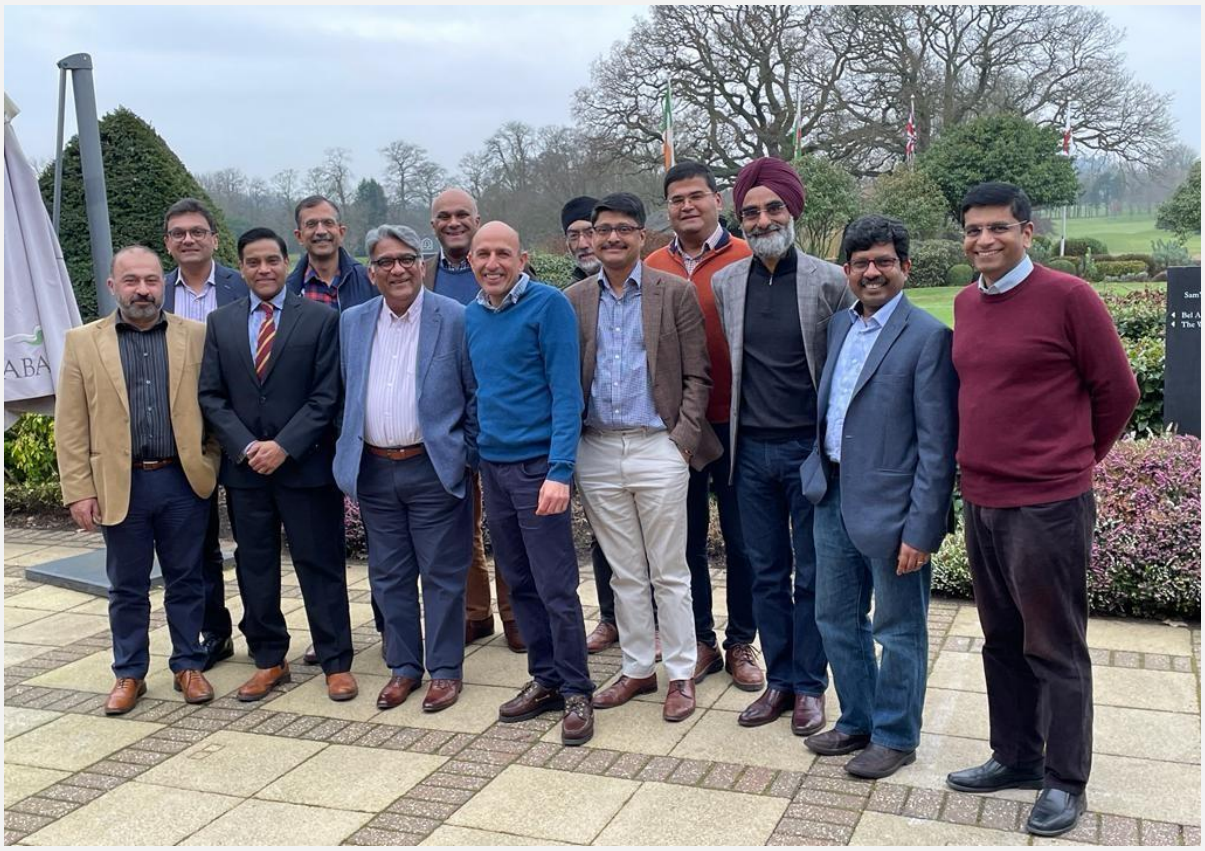
The birth: Sunil Bhudia's hard work and sponsorship by Cardio Solutions made it possible for us enthusiasts to meet on the 25th of November, 2011 at The Belfry Hotel and Resort for an evening meal and the following day convene and put our heads together to work out ground rules for the club. The first item on the agenda was a suitable name for our club. The previous batch of surgeons had named their group after the place they held their first meeting. We unanimously agreed to do the same and 'The Belfry Club' was thus born. We agreed to be a group of consultant cardiac and thoracic surgeons appointed between 2006 and 2012. Any consultant surgeon seeking to be included in our group could do so by having their name proposed and ratified by members at one of our meetings. 'Moninder Bhabra, we were delighted to include you in our group.'

The purpose: Since our first meeting we Belfarians have met many times, on a yearly basis, at different venues. Mahmoud Loubani and Mubarak Chaudhry treated us to The York Marriot Hotel in November 2012 where we met on a Saturday starting with lunch as agreed previously. Manoj Kuduvalli invited us all to Liverpool in 2013 and Aman Coonar at The Double Tree by Hilton Hotel in Cambridge in 2014. At each of the meetings we have had many interesting deliberations especially on non-scientific topics. Important ones being on our duty of candour, gaming of results, how to deal with difficult colleagues, and challenges and opportunities we surgeons face in our daily practices. Gavin Murphy was going to play host in 2016. However, due to a cycling accident he was unable to do so and instead

Balacumaraswami stepped in. We met at Crew Hall in Cheshire. A great venue where Moninder Bhabra was an invited guest and gave us all a fascinating talk on his amazing experience of trekking to the Everest Base camp. Since then we have met at The Forest of Arden a couple of times and at the recent meeting, arranged by Maninder Kalkat and Balacumaraswami at The Belfry itself, on the 28th of January, 2023. Here we discussed at length the importance of building resilience in ourselves to prosper in our work; reflected on maintaining a healthy work-life balance for a happy family life; on the values of regular exercises at work as individuals and for the whole team; and finally looked at the pensions schemes and steps to mitigate penalties.

Quality family time: To meet with family members and witness the joy of children enjoying themselves, whether splashing out in the swimming pool or later joining us at dinner has been a brilliant experience for everyone.

Entertainment: Jokes, anecdotes, a bit of leg pulling, a Karaoke style singing, which was kick started by Ranjit Deshpande and glimpses of the Bhangra, after a delicious buffet meal, was a great way to chill out with colleagues and family.



Virtual reality in SCTS Meeting

Prof. B Krishnamoorthy and Sridhar Rathinam

Virtual Reality (VR) offers a new way of engagement in training and education as well as patient and professional experience. It can teach the healthcare professionals new procedures and can determine their level of competence before they operate on patients. It also allows the trainee healthcare professionals to perform simulated tasks and hone their skills with deliberate practice.

Virtual reality technology enables the healthcare professionals to virtually explore a patient's anatomy, practicing the surgical scenarios, much like a pilot uses a flight simulator. It also offers mindfulness experience like yoga and meditation for patient and clinician wellbeing. VR can simulate staff, patient health and wellbeing and reduce the anxiety, stress prior to the surgery.

Realistic simulations of emergency scenarios in virtual reality allows healthcare staff to practice their skills in a safe and controlled environment. VR can be used to provide a wide range of training scenarios, including those that are difficult to replicate or rarely encountered in daily practice.

Our SCTS Nurses and Allied Health Professional (NAHP) group introduced two VR sessions in the SCTS University Day to test the uptake of VR teaching and the efficacy of the VR teaching among the NAHPs.

1. Session one consisted of VR frontline system which simulated and promoted the staff well-being,
2. Session two involved the simulation of Cardiac Advance Life Support.

In addition, we provided frontline **DR virtual reality mindfulness session on 19th,20th and 21st March 2023 during SCTS annual meeting in the mezzanine.** VR sessions offered quick experience with an uplift in mood often achieved after a 7-minute experience on mindfulness sessions. Well-being departments are using the system to help relieve stress, anxiety, burn out and results have shown usage can help regulate sleep.

VR mental health and well-being session:

Virtual Reality (VR) creates a simulated world which immerses the viewer into calm environment (fig: 1,2,3). Immersive Therapeutic Treatments (ITT) simply describes the advantages of this immersive quality resulting in significant changes within the brain when in VR world. The overwhelming amount of information the brain receives increases the cognitive load to such an extent that it reduces the brain's ability to process pain and anxiety making it an effective tool in the treatment of mental illness. VR helps to rewire your brain and grow healthier pathways that promote resilience, relaxation, recovery, and results.

DR.VR® Frontline was created at the beginning of the pandemic it offers a solution to help reduce stress and anxiety for NHS staff. The device was trialled with Cwm Taf Morgannwg University Health Board in a service evaluation and showed that DR.VR® was safe and clearly helped staff.

Designed with a staff-wellbeing psychologist, DR. VR comes with 7 x 7.5-minute relaxation sessions. These are created to teach staff simple techniques to help reduce stress and anxiety. Sitting within beautiful locations staff are guided through breathing exercises, mindful seeing and listening, muscle relaxation sessions and body scanning. These techniques are helpful in the moment but will stay with staff after they have finished the course.

Advanced Life Support VR session:

Patients that undergo cardiac surgery, the risk of post-operative cardiac arrest is around 3%. Arrests can be stressful and chaotic situations that demand prompt and decisive action from healthcare staff to restore circulation. Guidelines recommend that in cases where re-sternotomy is indicated, this should be done within 5 minutes of the initiation of to achieve the best outcomes for the patient. To reach this target, the whole team looking after the patient needs to operate like a Formula 1 pit crew. That is, to be well versed in the protocol, and have equipment ready to go, and know exactly what role they play, and maintain sufficient situational awareness when the clinical course takes an unexpected turn.

Virtual reality (VR) simulation for Advanced Life Support (ALS) after cardiac surgery, including cardiopulmonary resuscitation (CPR) and emergency re-sternotomy procedures. The participant simulates roles as the team leader, guiding the team through the resuscitation to achieve key steps before the timer runs out. They can then take on the role of surgeon, preparing the required equipment and executing a re-sternotomy, before carrying out internal cardiac massage and/or internal defibrillation.

Simulation training enables training of multiple cases with unlimited practice (and possible errors) without compromising patient safety or the need for setting up training sessions (fig:4,5,6). Multiple studies have shown that simulation training effectively improves knowledge & confidence and can increase the accuracy with which the cardiac surgery ALS protocol is applied.

This session offered training simulations for a whole day at this year's SCTS conference for nurses & allied health care professionals. Delegates were able to enter the virtual world to run through multiple cases including patients with VF, pVT, PEA, Asystole, and other ALS scenarios to sharpen and refresh their skills in an immersive 3D environment.

In addition, there were sessions which covers the open sternotomy simulations, lung stapling, coronary anastomosis, valve replacement surgeries, aortic root replacement biatrial ablations, VR guided suturing sessions and so on.

Revising and improving the SCTS Constitution

Rana Sayeed, Honorary Secretary

The SCTS is the professional society for all healthcare professionals involved in cardiothoracic surgery. From its founding as a society of about 24 consultant thoracic surgeons, the membership has grown to over 1500, including consultants, NTNs and Trust-appointed doctors (TADs), nurses and allied health professionals (NAHPs), and medical students.

As a charity and limited company, the SCTS is governed by its Articles of Association (the 'constitution') that define its objectives and powers and regulate its administration. The Trustees of the SCTS are responsible for its management and administration and are the voting members of the Executive. Currently, there are six elected trustees, all consultant members, in addition to the President, President-Elect, and the three appointed officeholders – Honorary Secretary, Honorary Treasurer, and Meetings Secretary.

The SCTS constitution was last revised in 2012 when the name was changed from the Society of Cardiothoracic Surgeons to the Society for Cardiothoracic Surgery, but the SCTS has continued to develop, and the constitution has become out-of-date.

The President presented proposals for the revision of the constitution at the Annual Business Meeting in March 2022, and these have been discussed and refined at the Board of Representatives meeting, the Executive meeting, and, most recently, at an open webinar. Overall, the constitution needs updating to reflect the latest regulations and guidance from the Charity Commission. However, the most significant proposals are an increase in the number of trustees and a change in the membership categories able to vote.

- **Non-consultant Elected Trustees:** Currently, only consultants and NTNs are eligible to vote, and only consultants can serve as trustees. We propose to create three additional non-consultant trustees, one to represent and be elected by the membership categories of i) NTNs, ii) TADs, and iii) NAHPs.
- **Communications Secretary to become an Appointed Trustee:** With the growing importance of social media and other modes of communication, the Communications Secretary should also become an appointed trustee to help the SCTS fulfil its aims.
- These proposals would increase the number of trustees from eleven to fifteen and allow the representation of NTNs, TADs, and NAHPs at the highest level of SCTS decision-making.

There are other proposals already adopted or under consideration that do not require revision of the constitution:

- Appointment and election of trustees. The eligibility criteria for trustees, such as good professional standing and conflicts of interest, have been formalised, and the interview process for appointed trustees has been made more transparent and robust.
- A social media policy to cover i) the SCTS's use of social media to promote its activities and ii) members' responsibilities on social media to avoid any comment that might lead to reputational harm to SCTS.

The two main proposals for non-consultant trustees and a Communication Secretary trustee need approval by the members. There will be a vote on the two resolutions at the online Annual General Meeting in.

Please attend the AGM and influence the future of your Society.

We thank you all for your support for the

From the Chest Creative Team: Taet Chesterton, Akhash Rathinam, Emma Piotrowski & Gridhar Rathinam