Training Programme Information for Posts in Cardiothoracic Surgery at ST1 Level

Recruitment 2013

This document has details of all of the training programmes in the UK.

Entry requirements for all placements are in line with the Modernising Medical Careers Person specification which can be found on the MMC website: http://www.mmc.nhs.uk/ and the Applicant Guide.

Details of the full curriculum for Cardiothoracic Surgery ST1 can be found on the Intercollegiate Surgical Curriculum Programme (ISCP) website: https://www.iscp.ac.uk/Default.aspx

Further details will be available from your new employing organisation once you have accepted an offer of a post.

Below are the Deaneries which have indicated they will be recruiting an ST1 in Cardiothoracic Surgery. Any changes to posts will be updated on the Wessex Deanery website and in this document.

<table>
<thead>
<tr>
<th>East Midlands</th>
<th>Northern</th>
</tr>
</thead>
<tbody>
<tr>
<td>North West</td>
<td>Scotland (TBC)</td>
</tr>
<tr>
<td>Wales (TBC)</td>
<td>Wessex</td>
</tr>
<tr>
<td>West Midlands (TBC)</td>
<td></td>
</tr>
</tbody>
</table>

Any information not included in this document should be available from specific deanery websites.
East Midlands

Deanery Rotation Base(s)

<table>
<thead>
<tr>
<th>HOSPITAL</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glenfield Hospital</td>
<td>Leicester</td>
</tr>
<tr>
<td>City Hospital</td>
<td>Nottingham</td>
</tr>
</tbody>
</table>

East Midlands Healthcare Workforce Deanery (EMHWD) is an integral part of NHS Midlands and East, and the East Midlands Local Education and Training Board (LETB). The Deanery teams work closely with the Education Commissioning and Workforce teams in East Midlands to ensure that together we deliver a fit for purpose healthcare workforce dedicated to providing high quality safe healthcare for the population of the East Midlands.

The area in which our educators work is geographically large and serves a population of 4.3 million, and a healthcare workforce in excess of 80,000. This provides a breadth of learning and working environments including some of the largest teaching hospitals nationally and some of the smallest rural Primary Care Trusts.

The Deanery is led by Dr Sheona MacLeod as Postgraduate Dean

Rotation Information

Expected rotation arrangements for this programme are:

**ST1**: 12 months in Glenfield Hospital : 4 months Thoracic Surgery (Mr Nakas, Mr Waller); 4 months Cardiac Surgery (Prof Murphy), 4 months General Surgery (LRI)
**ST2**: 12 months in Nottingham City Hospital : 4 months Emergency Surgery (Mr Brooks, QMC Nottingham), 4 months Thoracic Surgery (Mr Duffy); 4 months Cardiac Surgery (Mr Richens)
**ST3**: 3 months ITU module (Intensive Care Society approved) in Leicester (supernumerary, supervised by Intensivist Dr Allsager, surgical on-call) ; 9 months basic cardiac surgery in Leicester (Prof Murphy)
**ST4**: Basic pleuropulmonary surgery in Nottingham (Mr Majewski)
**ST5**: 6 months intermediate adult cardiac surgery in Nottingham [Mr Richens, Mr Mitchell] ; 6 months Congenital cardiothoracic surgery/ECMO in Leicester [Mr Peek].
**ST6**: Intermediate pleuropulmonary surgery in Leicester [Mr Waller, Mr Nakas]

These placements are discretionary based upon competency attainment and career progression. The program is seeking SAC recognition for ST7/8 training in advanced Cardiac Surgery from 2013.

**ST7**: Advanced oesophageal surgery in Nottingham [Mr Duffy]. *Advanced cardiac surgery in Nottingham (Mr Mitchell, Mr Richens).*
Trust Generic/Specialty Information

Glenfield Hospital, University Hospitals of Leicester (UHL)

The Cardiothoracic Unit is sited at the Glenfield Hospital. UHL is a university teaching hospital affiliated with Leicester University Medical School. At present the Cardiac Surgical Unit has 49 surgical beds, 23 adult intensive care beds and 10 paediatric intensive care beds. There are five operating theatres. The Cardiothoracic Unit serves the southern half of the East Midlands SHA, which comprises a population of 2.8 million people. The Unit provides a comprehensive medical and surgical service for patients with cardiac and thoracic disease, including congenital heart disease, but excluding transplantation. The annual cardiac surgical workload comprises over 1000 operations for acquired heart disease, 300 operations for congenital heart disease. 80 patients were treated at the regional unit for extra corporeal membrane oxygenation based at this hospital.

The Thoracic Surgical Unit has 22 beds including 5 integrated HDU beds. The full range of pleuropulmonary surgery is performed for Leicestershire, Northamptonshire, South Staffordshire and South Derbyshire together with national referrals for mesothelioma surgery. Annual workload comprises: over 800 thoracic surgical procedures including 35 radical mesothelioma resections and 30 LVRS procedures. Over 15% of all major lung cancer resections are performed by VATS. Trainees carried out 60% of all lung cancer resections last year.

University Hospitals of Leicester NHS Trust - Glenfield Hospital:

Cardiac: 2 training posts, 1 in 5 non-resident rota (currently 1 LAT)
Congenital: 1 training post; supernumerary (currently 1 ST)
Thoracic: 2 training posts, 1 in 5 non-resident rota (currently 1 ST, 1 OOPT)

Nottingham University Hospitals, City Hospital Campus

Nottingham University Hospitals is a major provincial teaching hospital. There are 1207 beds on the City campus. The City Hospital provides a wide range of specialties but there is no Accident and Emergency Department on the campus. When current developments are completed, it will have over 1,400 beds, making it one of the largest hospitals in Europe. All these beds are located on one 85 acre campus, with outpatient facilities and all support services. The hospital employs 4,500 staff, deals with 55,000 inpatients per annum, including day patients, and over 180,000 outpatients per year.

There are several regional specialties: Cardiac Surgery, Thoracic Surgery, Renal Dialysis and Transplantation, Burns and Plastics, Cytogenetics and neonatal Medicine and Surgery.

Over 750 major thoracic operations are performed each year including 60 major oesophageal resections. Over 800 cardiac cases are performed each year through a 16 bedded critical care unit which is staffed by nurse practitioners allowing the trainee surgeons to run a non-resident on-call rota.
Nottingham University Hospitals NHS Trust – Nottingham City Hospital

Cardiac: 2 training posts, 1 in 5 rota. (currently 2 LATs)
Thoracic: 2 training posts, 1 in 5 non-resident rota (currently 1 ST3, 1 LAT)

Jobplan
The trainee will attend at least 3 operating sessions and one outpatient clinic per week. In addition they will attend at least one Consultant ward round per week. It is hoped that the trainee will be on a 1 in 8 on-call rota in Leicester at ST1 and in Nottingham for Emergency Surgery but from ST2 Cardiothoracic onward on a 1 in 4 or 1 in 5 non-resident on-call rota. They will have the opportunity to participate in the postoperative care on HDU and wards and the assessment of cardiothoracic trauma. In ST1 in the operating theatre the trainees will be supervised in the opening and closing of the chest; the harvesting of conduits for revascularization; diagnostic videoassisted thoracoscopic and mediastinoscopy and airway management (bronchoscopy/tracheostomy).

Teaching
In addition to the local MDTS and weekly departmental teaching sessions the rotation has an organized, comprehensive monthly regional teaching program including a biannual Midlands Cardiothoracic Surgical Meeting which encompasses hands-on training and abstract competitions. Attendance at the Society for Cardiothoracic Surgery Annual Meeting and Royal College Courses in Cardiothoracic Surgery will be expected. The trainee will be expected and encouraged to complete and present (preferably at a national meeting) one audit or research project for each 6 month attachment.

Mr Waller as TPD will supervise the completion of a minimum of 40 WPBAs per year including 1 MSF per attachment.

Summary
The East Midlands offers a compact, comprehensive training program by a closely co-ordinated committed faculty.

We have an excellent record in placing our Core trainees into ST3 posts. In each of the last 3 years 4 of our CTs have been either shortlisted or appointed at National selection. All but one of our trainees have passed the FRCS(CTh) exam first time and we have placed 9 of our last 10 CCT holders into Consultant posts.

We accept that training a general cardiothoracic surgeon is no longer feasible and will therefore aim to train Consultants with highly developed specialist interests in either Thoracic or Adult Cardiac surgery.

Further information available from:

Mr David Waller, TPD david.waller@uhl-tr.nhs.uk
Or
Mr Keng Ang, Trainee Rep on RTC klmailbox@aol.com
Northern Deanery

Deanery Rotation Base(s)

<table>
<thead>
<tr>
<th>HOSPITAL</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeman Hospital</td>
<td>Newcastle</td>
</tr>
<tr>
<td>James Cook University Hospital</td>
<td>Middlesbrough</td>
</tr>
</tbody>
</table>

The Northern Deanery

The Northern Deanery operates across a wide and geographically varied area covering Northumberland, Tyne and Wear, North Cumbria, County Durham and Tees Valley. We work with 11 acute trusts (which includes two specialist trusts providing mental health and learning disabilities services), 13 primary care trusts, 196 general practice training practices and 60 general dental training practices.

In the recent GMC 2012 National Trainee Survey, the Northern Deanery scored top in the following:
- Overall trainee satisfaction - highest scoring deanery in England, Wales & Northern Ireland for the second year running
- Clinical supervision - highest score in the whole of the UK
- Educational supervision - highest score in the whole of the UK
- Induction - highest score in the whole of the UK
- Feedback - highest score in the whole of the UK
- Adequate experience - highest in England, Wales & Northern Ireland

Because we know that the quality of education and training is of paramount importance to you, our investment in our trainers and their training is essential to our success. It is also important to have wide and varied experiences in different fields and environments. You will gain a breadth of experience in selected and supervised hospital posts throughout the area in large university acute hospitals, community hospitals and district general hospitals to ensure you get the training you need to give you a rewarding future career. Within these areas you will have the opportunity to work with nationally and internationally recognised clinicians and leaders.

To find out more information about what it is like to ‘Live and Train’ in the Northern Deanery you can visit our website [www.liveandtrain.nhs.uk](http://www.liveandtrain.nhs.uk)

The Northern School of Surgery was established in September 2006 as the first new wave “specialty postgraduate school” in the Northern Deanery to deliver the modernizing medical career agenda across the previously separate nine surgical specialties.

At the same time each medical specialty was required to submit for approval “a curriculum” which for the first time represented an explicit statement of the syllabus, mode of assessment, way-points and endpoint of specialty education.

The School of Surgery was charged with reorganising surgical education and training within the Deanery so as to deliver the newly approved surgical curricula to the required standards.
At its heart the School of Surgery is accountable to its Board on which sits the Postgraduate Dean, a lay representative and a representative of the Strategic Health Authority (usually a Chief Executive of an Acute Trust).

This Board is the meeting point where alongside the members above, each individual specialty training committee, including the Core Surgical Training committee, agree strategies and policy relating to the delivery, conduct and quality assurance of postgraduate surgical training in the Northern Deanery.

Each Specialty Training Committee is, of course, responsible for the regulation and training of that specialty and for educational well being of all trainees committed to that specialist surgical career.

One of the GMC standards defines the Deanery responsibility for quality assurance and quality monitoring as part and parcel of the ongoing educational process. This responsibility is cascaded to individual schools and thence to individual STCs. This annual process leads to a continuously evolving evaluation that generates an **action plan** addressing quality issues relating to specialty surgical education and training in the Deanery.

A further committee, The Education Committee, is responsible for organising courses and educational events, not only for trainees but as part of a programme of Faculty Development which aims to prepare “surgical educators” who are able to deliver surgical education and training in line with the new curricula and but additionally able to provide trainees with support, guidance and constructive feedback.

Finally, the School of Surgery is able to communicate issues relating to manpower and consultant job planning where this affects education and training to Trusts through a Forum involving Directors of Postgraduate Education and in collaboration with the Forum involving other heads of school.

Further information can be found at:-

http://www.northerndeanery.nhs.uk/NorthernDeanery/specialty-training

The Deanery encompasses training in Cardiothoracic Surgery in two regions – Newcastle and Middlesbrough. The ST1 will be managed in Newcastle and on successful run-through, will rotate to Middlesbrough.

All sub-specialty components of Cardiothoracic Surgery are offered within this rotation, with an international Transplantation and congenital cardiac surgery reputation.

**Rotation Information**

Expected rotation arrangements for this programme are:

- We have successfully managed Core Trainees who have expressed a wish to do Cardiothoracic Surgery Higher Surgical Training. We have given them an exposure in their CT1 time and after successful MRCS have given them a second diet of the Specialty at CT2 to ready them for ST3 application. Two years running we have had our own highly successful candidates choosing the Northern Deanery for their ST3 training.
As a result we feel ably placed to offer the same to ST1 candidates. Under the dual supervision of Core and Specialist Program Directors, we can offer 16 months of Cardiothoracic Surgery Training in two diets, with a directed rotation of relevant postings preparing them for MRCS. The candidate will be supported with ATLS, BSS, CCrISP and Specialty Skills in Cardiothoracic Surgery courses.

**Trust Generic/Specialty Information**

- Each Trust has established cardiothoracic training: – 2 cardiothoracic and 5 cardiac surgeons in Middlesbrough - specialist interest in minimally invasive mitral surgery; 1 cardiothoracic, 3 thoracic, and 2 congenital surgeons in Newcastle –specialist interest in advanced heart and lung failure, and minimally invasive thoracic surgery. Within the 19 surgeons, there is an ex-president of SCTS, present SAC dean, and national lead for transplantation, so there is plenty of resource for career advice and steering. Newcastle Upon Tyne Hospitals NHS Trust offers relevant postings in non-cardiothoracic surgery to allow successful preparation for MRCS and the ST3 post –it is envisaged that this will include plastic surgery and general surgery.
- The ST1, when in cardiothoracic surgery, will spend a supernumerary month in cardiothoracic intensive care, time on the ward and in pre-assessment clinic to ensure thorough knowledge is gained of the ward patient, and time in theatre and clinic to hone surgical and management skills.
- There are 9 Nurse practitioners who manage the patients in pre-assessment clinic and on the ward freeing up the ST1 to immerse themselves in their surgical training. There are 3 surgical nurse practitioners to allow surgical training in cardiac and thoracic theatre

**Teaching**

- There is a regular weekly teaching which the ST1 will contribute to, and monthly regional training – there is a planned continuum of revascularisation wet and dry labs training Jan to June 2013, and after this a planned simulation, wet-lab and cadaveric dissection for minimally invasive thoracic surgery. In addition to this there is a program of simulation of cardiac surgery emergencies.
- All minimally invasive thoracic surgery procedures will be recorded to allow personal assessment of surgical progression and comparison to consultant procedures.
- One consultant in the rotation has won the Silver Scalpel award 2012, for excellence in cardiothoracic training.
Surgical Training Centre fully accredited by Royal College of Surgeons
Newcastle is first centre in England to receive full accreditation from RCS
*Posted: 11 July 2012*

**CORE SESSIONS**

CT1 & CT2

- Surgical Instruments / Laparoscopic Stack
- Virtual Reality Simulation:
  - Lap Mentor / Simendo Training
- Position & Draping of Patients
- Wound Closure Principles & Advanced Techniques
- Suturing Techniques
- Decision Making
- Case Based Discussion & Diagnostic Dilemmas

*Healthcare at its very best - with a personal touch*
CORE TRAINEES

Healthcare at its very best - with a personal touch.
North West Deanery

ST1 and ST2 Cardiothoracic Surgery Training Locations:

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wythenshawe Hospital, University Hospital of South Manchester NHS Foundation Trust</td>
<td>Wythenshawe, Manchester</td>
</tr>
</tbody>
</table>

The School of Surgery was established within the North Western Deanery in December 2007 following the appointment of Professor Phil Turner as the Head of School.

The School oversees training in all of the recognized surgical specialties. The aim is to provide both core and specialist training to ensure new consultants are appointed with the knowledge and skills required for a lifetime of professional practice. The School is responsible for more than 300 surgical trainees across the Region which extends from Barrow-in-Furness in the north to Stockport in the south and from the Pennine moors in the East to the West coast. The population served is over 5 million and there are approximately 500 surgical consultants providing clinical services and training across the Deanery at 19 centres.

The core function of the School is to manage the quality of training, ensuring that trainees have access to the highest standards of teaching at all stages of their careers. The School has a lead role in trainee recruitment, assessments and appraisals, preparation for examinations, practical skills training and the development of non-technical skills. The School has close links to the Manchester Medical School and other Universities in the region who provide health related education and facilities for research. The Region has an excellent reputation in surgical research and trainees are encouraged to become involved in the academic aspects of surgery. In addition, there are opportunities to gain specific training in Medical Education and Medical Leadership.

Training has to comply with the requirements of the surgical curriculum so the School works closely with the Royal Colleges and Specialty Advisory Committees at all levels.

Professor Phil Turner is a consultant orthopaedic surgeon based at Stepping Hill Hospital, Stockport. Before being appointed as Head of School, he was Regional Advisor and then Programme Director in Trauma and Orthopaedics in the North Western Deanery. He has a specialised practice in knee surgery and remains active in teaching and training at local, national and international levels. He is an elected member of BOA Council and sits on the Training Standards Committee. In addition he is an examiner and assessor for the FRCS (Orth) and is Chairman of the Confederation of Postgraduate Schools of Surgery (CoPSS).

The Associate Dean leading for the North Western Deanery and responsible for the School is Professor Pramod Luthra.
ST1 & ST2 Cardiothoracic Surgery

Introduction / Overview of the programme:

Cardiothoracic surgery at ST1 and ST2 is delivered in line with the Intercollegiate Surgical Curriculum Project [www.iscp.ac.uk](http://www.iscp.ac.uk).

General description of rotation:

The ST1 and ST2 years will consist of 18 months in Cardiothoracic Surgery plus 6 months General Surgery. The ST1 rotation will involve 6 months in General Surgery at Wythenshawe Hospital and 6 months in Cardiothoracic Surgery at Wythenshawe Hospital. The ST2 rotation will be 12 months of Cardiothoracic Surgery at Wythenshawe Hospital.

Educational opportunities:

Trainees in ST1 and ST2 will be expected to attend local educational programmes which are held within the hospital they are working in. There is a comprehensive core teaching programme which takes place on Wednesday afternoons at Wythenshawe Hospital, attendance is mandatory and an attendance register is kept and monitored. The timetable for teaching can be viewed at [www.surgicalcourses.com](http://www.surgicalcourses.com)

Research / audit / teaching:

Opportunities for clinical research exist within all departments involved in the programme and trainees are expected to take advantage of this. All trainees should be actively involved in audit on an ongoing basis and be in a position to demonstrate this at annual appraisal and ARCP interviews. Teaching of less experienced medical colleagues, medical students, nurses and other paramedical staff is an integral part of the post and all trainees are expected to be involved in this.

ST4 to ST9 Rotation In North West Consortium (Higher Surgical Training) will be in Northwest Consortium

**North West Cardiothoracic Consortium**

**North West and Mersey Deaneries**

The North West Consortium will provide one of the most comprehensive training programmes for Cardiothoracic Surgery in the UK, with opportunities to develop subspecialty interest in all areas of cardiac and thoracic surgery including transplantation surgery, oesophageal surgery, congenital surgery, specialised aortic surgery, and mitral valve repair. Close links with Liverpool and Manchester Universities and the Paterson's Institute of research (Christie Hospital) along with the excellent transplant research lab offer excellent opportunities to pursue academic aspirations. The program will offer opportunities to actively participate in the Northwest Cardiac / Thoracic surgery audit, North West Quality improvement program, North West Thoracic Society meetings and North West regional teaching sessions. The Northwest consortium will also offer excellent high quality educational resource which is highlighted below.
The North West and Mersey Deaneries are geographically adjacent to each other and have formally collaborated for Cardiothoracic Surgical training since August 2009 to form the North West Cardiothoracic Consortium. Applications are directed to the Consortium rather than to the individual Deaneries. After appointment trainees are allocated to either the Mersey or the North West Deanery for overall supervision of their training.

The specific program for any individual trainee will be developed to reflect his/her specific training aspirations, commensurate with the overall requirements of the curriculum and the availability of specific training opportunities. Trainees can expect to spend the majority of their training time within the Deanery to which they are appointed.

Given the size of the consortium and the sub specialty strengths of the consortium, it is possible for trainees to specify from the outset their preferred training program to include either general cardiac surgery, mixed practice cardiothoracic surgery or general thoracic surgery.

The program involves the following centers:

<table>
<thead>
<tr>
<th>HOSPITAL</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liverpool Heart And Chest Hospital (LHCH)</td>
<td>Liverpool</td>
</tr>
<tr>
<td>Alder Hey Children’s Hospital</td>
<td>Liverpool</td>
</tr>
<tr>
<td>University Hospital South Manchester (UHSM)</td>
<td>Wythenshawe, Manchester</td>
</tr>
<tr>
<td>Manchester Royal Infirmary (MRI)</td>
<td>Manchester</td>
</tr>
<tr>
<td>Lancashire Heart Centre, Victoria Hospital</td>
<td>Blackpool</td>
</tr>
</tbody>
</table>

**Mersey Deanery**

**Liverpool Heart and Chest Hospital NHS Foundation Trust**

The Liverpool Heart and Chest Hospital (LHCH) is one of the largest single centre cardiothoracic units in the United Kingdom and is an autonomous single specialty Foundation Trust on the site of Broadgreen Hospital. It provides tertiary services in Cardiothoracic Surgery, Cardiology and Chest Medicine to a population of 2.8 million in Merseyside, North Wales and the Isle of Man as well as parts of Lancashire and Cheshire. All types of cardiothoracic surgery are carried out with the exception of transplantation. The hospital carries out over 3000 cardiothoracic operations every year. Consultant staffing comprises 10 cardiac surgeons, 4 thoracic surgeons and 2 cardiothoracic surgeons.
The service has a number of particular strengths:

- The largest aortic surgical service in the UK including complex thoracoabdominal procedures and a significant amount of endovascular procedures. There is a separate consultant on-call rota for emergency aortic surgery.
- Off-pump coronary artery bypass surgery – one of the largest experiences in the UK and Europe.
- A comprehensive mitral repair program including radiofrequency ablation.
- Minimal access aortic valve and coronary artery surgery.
- A transcatheter aortic valve implantation (TAVI) program with both transfemoral and transapical approaches.
- Epicardial pacing.
- All aspects of minimally invasive thoracic surgery including a mature VATS lobectomy service.
- Complex oesophagogastric surgery especially for OG cancers. Close cooperation with upper GI surgery. OG cancer MDT based at LHCH.
- Lung volume reduction surgery, endobronchial valve implantation.
- Chest wall and mesothelioma surgery.
- Comprehensive cover of lung cancer MDT’s with outreach clinics in all regional hospitals.
- Advanced colorectal cancer MDT for management of pulmonary metastases.
- Links with regional sarcoma MDT.

**Alder Hey Childrens NHS Foundation Trust, Liverpool**

This hospital, which is one of the largest children’s hospitals in Europe, serves a population of 6 million, covering the North West of England, North Wales and the Isle of Man. All aspects of paediatric heart disease are managed with the exception of paediatric transplantation. Over 450 paediatric cardiac operations are carried out every year. There are well-established transitional arrangements in place for adult patients with congenital heart disease, with seamless transfer of care to Manchester Royal Infirmary.

Trainees in Alder Hey are exposed to all aspects of congenital heart disease. They are actively involved in pre-operative evaluation, intra operative surgical strategies, and immediate post-operative critical care management of the children. Opportunities are provided to perform paediatric cases as first operators and to be involved in more complex neonatal procedures as first assistant. There is an active interdepartmental teaching and research program with paediatric cardiology and intensive care.

**North West Deanery**

**University Hospital South Manchester NHS Foundation Trust (UHSM)**

The hospital is a tertiary referral center and provides a comprehensive service in cardiac and thoracic surgery, cardiopulmonary transplantation, ECMO and ventricular assist therapy. The hospital has a catchment population of 3.2 million for specialist services. Consultant staffing includes 7 cardiac surgeons, 1 cardiothoracic surgeon and 4 thoracic surgeons including one locum thoracic surgeon. The majority
of the cardiac and thoracic surgeons are involved in the transplant program. The service performs 900 cardiac, 1500 thoracic and about 45 heart/lung transplants per year.

Strengths of the service include the following:

- Heart and Lung Transplantation
- Mitral valve repair
- Aortic surgery including TAVI
- Heart assist device
- ECMO
- The entire spectrum of general thoracic surgery including VATS lobectomy, 24/7 airway intervention service, joint operating with spinal surgeons, LVRS, enobronchial valve implantation and pulmonary metastatectomy.

Central Manchester University Hospitals NHS Foundation Trust
Located on the site of Manchester Royal Infirmary (MRI) the Manchester Heart Centre offers tertiary cardiac and adult congenital cardiac service to a wide population. Consultant staffing include 6 cardiac surgeons including one locum. Two of the adult cardiac surgeon offer adult congenital cardiac surgery. The service performs 800-900 cardiac surgical operations. Strengths of the service include:

- Off Pump surgery
- Mitral valve repair service
- Redo cardiac surgery
- Adult congenital cardiac surgery program

Victoria Hospital NHS Trust, Blackpool
The Lancashire Cardiac Centre provides adult cardiac and thoracic surgery for the people of Lancashire, Cumbria and beyond. The unit is planning to do 1200 adult cardiac, 200 major lung resections and around 400 other thoracic procedures this year.

The trainee will be exposed to a full spectrum of adult cardiac and thoracic surgery.

- Port access cardiac surgery program. This is the 2nd largest in the country with 1 to 2 cases a week, mainly for mitral valve repair.
- Off pump CABG
- Endoscopic Saphenous Vein Harvesting
- TAVI program
- Suturless Aortic Valve program
- VATS Lobectomy
- Atrial Fibrillation Surgery and Epicardial pacing
- Weekly Thursday Cardiology/Cardiac Surgery MDT meeting for difficult cases
- Weekly Lung cancer MDTs at Blackpool, Preston, Blackburn and Lancaster
- Weekly educational meeting
North West Consortium Educational Resources

- Weekly teaching meetings at all hospitals
- Monthly North West Regional Teaching Program
- Wet lab sessions covering CABG, MVR, AVR, Mitral valve repair, Aortic root replacement and VATS surgery
- Mitral Valve Symposium
- National TOE Course
- Terms and techniques for aortic surgery for trainees
- Imaging in cardiothoracic / oesophageal surgery
- Perfusion in cardiac surgery
- Difficult Scenarios in cardiac, thoracic and oesophageal surgery
- North West FRCS(CTh) preparation course
- Viva practice for FRCS(CTh)
- FRCS(CTh) Examiners

Strengths of North West Consortium include the following

- Ability to provide comprehensive training in all aspects of cardiac, thoracic, congenital and transplantation surgery
- Ability to fully train a cardiac or thoracic surgeon with subspecialty interests
- Close relative geographic location of hospitals in the program
- Ability to provide training to suit the needs of all trainees
- Excellent educational resources
- High pass rate at FRCS(CTh) and excellent history of appointment to UK consultant positions for trainees
- Opportunities for academic development
- Trainee representation on regional training committee
- Deanery / School of Surgery support
- Previously hosted Intercollegiate FRCS(CTh) examinations
- Excellent trainee feedback

Operative Experience
The following information relates to the percentage of cases carried out by trainees as lead surgeon between 2007 and 2012, operating either alone or with consultant assistance.

Cardiac Surgery

LHCH
- All middle grades = 11%
- Senior (ST5-ST6) numbered trainees= 24%

UHSM
- All middle grades = 27%
- Senior (ST5-ST6) numbered trainees = 63%
- Heart retrievals = 100%
- Heart Implants = 3.6%
MRI

- All middle grades = 21%

Lancashire Cardiac Centre

- All middle grades = 10.3%
- ST4 trainees
  - CABG = 56%
  - AVR = 62%
- ST3 trainees - Sternotomy / IMA harvest / Cannulation / Decannulation
  - > 90% of cases

Thoracic surgery

LHCH

- All middle grades = 41%
- Senior (ST5-ST6) numbered trainees = 69%

UHSM

- All middle grades = 40%
- Senior (ST5-ST6) numbered trainees = 76%
- VATS lobectomy - Aug 2009 to Sep 2010 = 20 cases
- Lung retrieval = 100%
- Lung implants = 39%

Lancashire Cardiac Centre

- All middle grades = 20%

Junior Medical staffing

LHCH

- NTN specialty registrars: 7
- Clinical fellows (including overseas thoracic fellow): 7
- Specialty doctors: 3
- Rota = two tiers of full shift middle grade cover, EWTD compliant (junior = 1 in 9, senior = 1 in 8)
- SHO grade - CT1/CT2 = 2, FY2 = 3, Trust SHO = 5. Rota = 1 in 10

Alder Hey

- Specialist registrar/ Clinical Fellows: 5
- ROTA: 1:5, EWTD compliant

UHSM

- NTN specialty registrars: 3
- Clinical fellow: 5
- Speciality Doctor / Associate specialist: 3
- Transplant fellows: 5
- CT1/CT2 = 3
- Rota = 1:9 partial shift, EWTD compliant
- Trust fellow (SHO grade): 3
MRI
- NTN specialty registrars: 1
- Clinical fellow: 7
- Rota = 1:8 partial shift, EWTD compliant
- CT1/CT2/F1: 3

Lancashire Cardiac Centre
- NTN specialty registrars: 1
- Clinical fellow: 7
- Rota = 1:9, resident on call, EWTD compliant
- CT1 / CT2: 2
- Trust grade (SHO): 3
Wessex Deanery

This is a 8 year training programme in Cardiothoracic Surgery starting at ST1 aimed at doctors who can demonstrate the essential competences to enter this level of training. The programme is designed to support training for a CCT in Cardiothoracic Surgery. Details of essential competences and qualifications are detailed in the MMC person specification for Cardiothoracic Surgery at ST1 which is available from www.mmc.nhs.uk.

The anticipated outcome subject to satisfactory progression is completion of CCT in Cardiothoracic Surgery.

The programme is based in the following hospital in the Wessex Deanery:

<table>
<thead>
<tr>
<th>HOSPITAL</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Hospital Southamton</td>
<td>Southampton</td>
</tr>
</tbody>
</table>

Wessex Deanery is a relatively small deanery with a defined geographical area which does lead to there being a single unit of application. In the majority of cases, successful candidates will be asked to preference their choice of location for either one or two years. Placements will be based, as normal, on individual training and educational needs. Please note that applications are to the Wessex Deanery as a whole. This may mean that you may be allocated to any geographic location within the Wessex Deanery depending on training needs.

The Wessex Deanery covers a geographical area from Basingstoke in North Hampshire to Dorchester in West Dorset and the Isle of Wight to the South. This is a spread of approximately 65 miles North to South and 76 miles East to West. The Wessex Deanery serves a population of around 2.8 million people.

The Wessex Deanery is part of NHS South of England, comprising South Central, South East Coast and South West Strategic Health Authorities. The Wessex Deanery currently covers the health communities of South Wiltshire, Dorset, and Hampshire and the Isle of Wight. The Wessex Deanery is responsible for the training of some 2,500 trainees.

Rotation Information

The ST1 year will consist of 3 four month attachments in Intensive Care Medicine, General Surgery and Trauma and Orthopaedic Surgery. The ST2 year will consist of the first six months in Vascular Surgery and the second six months in Cardiothoracic Surgery. The ST3+ years will be spent at University Hospital Southampton (UHS).

Trust Generic/Specialty Information

The primary strength of the unit has been based on clinical and operative exposure. In both adult and congenital cardiac surgery, this would include the full range of standard and advance operative techniques. These include off pump surgery, the use of minimal extracorporeal circulatory support (MEC), minimally invasive surgery, valve repair and sparing surgery, and aortic surgery including thoraco-abdominal aneurysm surgery; Surgery for routine and complex congenital conditions such as
AVSDs, TGAs and HLHS are routinely undertaken. In addition, at both sites transcatheter aortic valve implantation (TAVI) is undertaken for high-risk aortic valve patients. SGH is a national referral centre for Fontan conversion surgery. There is also a comprehensive thoracic surgery programme with 5 dedicated thoracic surgeons offering a full range of exposure. This programme provides comprehensive training in minimally invasive thoracic surgery, including thoracoscopic lung resection, with an opportunity to have exposure to oesophageal surgery at University Hospital Southampton. There is also a consortium set up for training in cardiothoracic surgery between the Wessex & Oxford Deaneries.

- There are currently 4 adult cardiac surgeons, 1 adult/ congenital surgeon; 2 congenital cardiac surgeons and 5 thoracic surgeons based at Southampton;

- The training ethos is strong within the consortium with approximately 52% of the cardiac surgery cases undertaken by trainees at SGH in 2011-2012 12-month period.

- The academic profile of the Consortium is now very strong. There are 2 professors of cardiac surgery. The ex president for the SCTS and chairman of the SAC are members of the consortium. There has been 2 MDs, 2 PhDs awarded and over 130 publications in peer-reviewed journals within the last 3 years.

- On call at University Hospital Southampton. 5 approved posts. 7 trust fellows at SpR level. 1 in 12 hybrid rota. 1:12 residential on-call. The unit is EWTR and Band 1a compliant

**Teaching**

- There is a wet and dry lab facility, which is used for formal teaching twice a year. The dry lab facility is accessible by trainees on 24/7 basis at Southampton.

- There are weekly MDT meeting to discuss complex cases. All clinical activity is stopped so trainees can attend. There is also a weekly TAVI MDT meeting where trainees may attend if available. There is also a weekly grand rounds.

- There is a monthly didactic/ interactive curriculum based teaching. This alternates between Oxford and Southampton and the whole curriculum is covered over a 2-year period. This programme has been running since January 2010.

- Frequent informal tutorials and mock exams are arranged for trainees approaching the FRCS-CTh exam.

**Study and Training**

The primary aim of all posts is the training programme developed and there is a region wide syllabus and minimum standards of education agreed by all Trusts within the rotation.
The Deanery is committed to developing postgraduate training programmes as laid down by GMC, Colleges and Faculties and by COPMED - the Postgraduate Deans Network. At local level college/specialty tutors work with the Programme Director and Directors of Medical Education in supervising these programmes. Trainees will be expected to take part in these programmes (including audit) and to attend meetings with their nominated educational supervisor.

All posts within the training programme are recognised for postgraduate training by the General Medical Council (GMC) in accordance with their standards for training.

Study leave is granted in accordance with Deanery/Trust policy and are subject to the maintenance of the service.

All posts have a service element and the following covers the majority of duties. There will be minor variations in different hospitals but the list is aimed at covering the majority of duties:

1. Supervise, monitor and assist the House Officer (F1) in the day-to-day management of in-patients, in posts with an attached F1.
2. Liaise between nurses, F1 and F2 Doctors, patients, relatives and senior medical staff.
3. Attend and participate in ward rounds as timetabled.
4. Attend outpatient clinics.
5. Attend operating lists.
6. Take part in rostered emergency work including delivery suite.
7. Dictate discharge summaries.
8. Study for higher examination and maintain continued professional development.
9. Attend weekly educational and multidisciplinary sessions.
10. Undertake audit and patient safety projects at various times throughout the rotations.
11. Teach medical students as directed.
12. Co-operate with members of the personnel department when monitoring hours of work and other personnel issues.
13. Attend induction in each hospital or new department
14. Comply with all local policies including dress code, annual and study leave

Curriculum
The teaching and training in cardiothoracic surgery is followed as set out in the ISCP website

Teaching

- Local teaching programme available at each trust.
- Regional teaching programme first Friday of the month rotating between units.
  3 year rolling programme to include mandatory courses within curriculum.