EDUCATION, EDUCATION, EDUCATION

Narain Moorjani, Sri Rathinam
SCTS Education Secretaries

SCTS Education
SCTS EDUCATION

- Consultants
- Nationally appointed trainees (NTN)
- Fellows, core trainees, FY doctors (non-NTN)
- Allied Health Professionals – nurses, ANP, SCP
- Medical students
DELIVERY OF EDUCATION

• Courses

• Fellowships

• SCTS Education Website

• Operative video library

• SCTS University – Perspectives publication
CONSULTANT EDUCATION

- Leadership Courses
- SCTS University
- Ionescu Consultant Travelling Fellowship
- Consultant Education Survey
Consultant Surgeon Education and Professional Development Survey

Donald Whitaker, Consultant Education Lead
Sri Rathinam, SCTS Education Secretary
Narain Moorjani, SCTS Education Secretary

1. How long have you worked as a Consultant Cardiothoracic Surgeon?
   a) 0-5 years
   b) 5-10 years
   c) 10-15 years
   d) 15-20 years
   e) More than 20 years

2. Where do you work?
   a) England
   b) Ireland
   c) Northern Ireland
   d) Scotland
   e) Wales

3. How would you best describe your Consultant Cardiothoracic practice?
   a) Cardiac
   b) Thoracic
   c) Mixed (Cardiac & Thoracic)
   d) Congenital

4. Does the SCTS address your current educational and professional development requirements?
   a) Yes – Fully
   b) Partially – please expand or improve the program
   c) Not at all

5. Which of the following would interest you and how likely would you be to attend (1-10)?
   a) Advanced "Training the trainers"-type course.
   b) Non-operative theatre skills course (human factors course)
   c) Multi-disciplinary team-working course
   d) Leadership course
   e) NHS management course
   f) Medico-legal and consenting issues
   g) How to successfully write a business case/ develop a service
   h) How to develop a research portfolio / write a grant application
   i) How to develop private practice
   j) How to plan for retirement
   k) Controversies in clinical practice
   l) Operative tips & tricks
   m) Update on emerging technology
   n) Update of recent major trials and international guidelines
   o) Revalidation
   p) Other - ...........................................................................................................
   q) Not interested in attending SCTS Consultant Education Courses

6. Which of the following would influence your decision to attend a course (rank in order)?
   a) Cost
   b) SCTS approval
   c) CPD points
   d) Professional Leave allocation

7. Which of the following do you i) regularly attend or read and ii) find educationally useful (1-10)?
   a) SCTS Annual Meeting
   b) SCTS University
   c) SCTS Ethicon Consultant Thoracic symposium
   d) SCTS Website
   e) SCTS Bulletin

8. Would you be interested in development of a second SCTS University (held separately from the Annual Meeting)?
   a) Yes
   b) No

9. Were you aware that a second SCTS University was run in September 2016 (separate from the Annual Meeting)?
   a) Yes
   b) No

10. Do you think SCTS collaboration with Industry would help with the proctoring of new procedures?
    a) Yes
    b) No
NTN EDUCATION

• Portfolio of 11 curriculum-aligned, simulation-based training courses provided to all NTN

• Operative video prize and video library

• Webinars (in conjunction with RCS Ed)

• SCTS Education Ethicon Fellowships
<table>
<thead>
<tr>
<th>ST</th>
<th>Course Title</th>
<th>Course Title</th>
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<tr>
<td>3</td>
<td>Introduction to Specialty Training in Cardiothoracic Surgery</td>
<td>Operative Cardiothoracic Surgery Course</td>
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<tr>
<td>4</td>
<td>Core Cardiac Surgery Course</td>
<td>Core Thoracic Surgery Course</td>
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<tr>
<td>5</td>
<td>Intermediate Viva Course</td>
<td>Non-Technical Skills for Surgeons (NOTSS)</td>
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<tr>
<td>6</td>
<td>Cardiac sub-specialty course (mitral valve, thoracic aorta, TAVI, heart failure)</td>
<td>Thoracic Sub-specialty Course (VATS lobectomy, tracheal surgery, chest wall surgery)</td>
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<tr>
<td>7</td>
<td>FRCS (C-Th) Revision / Viva Course</td>
<td>FRCS (C-Th) Clinical Examination Course</td>
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<tr>
<td>8</td>
<td>Cardiac Surgery Pre-Consultant Course</td>
<td>Leadership &amp; Professionalism Course</td>
</tr>
<tr>
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<td>Thoracic Surgery Pre-Consultant Course</td>
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SCTS Education
Operative Video Prizes

Cardiothoracic Surgical Trainees (NTN and non-NTN) are invited to produce an operative video, appropriate to their year of training (see attached list overleaf).

- Cardiothoracic Surgical Trainees (NTN and non-NTN) are invited to produce an operative video, appropriate to their year of training (see attached list overleaf).
- There will be prizes for the best cardiac surgery and best thoracic surgery video.
- The videos should be submitted as a high definition (HD), AVI or MPEG-4 video file, 5 minutes in duration, and can be made using any recording device, including smart phones, video cameras or professional equipment.
- Please obtain patient consent and fill in the application form, which requires consultant approval.
- If selected, the videos may be edited and included in an SCTS operative videos app.
- For further details, please contact Nalini Moorjani (SCTS Cardiac Tutor) or Sri Rathinam (SCTS Thoracic Tutor) at tutor@scts.org.

Closing date: 18th Feb 2018

Thoracic procedures

ST3
1. Placement of VATS ports (uniportal, anterior, posterior)
2. Lateral thoracotomy
3. Muscle sparing thoracotomy
4. Posterolateral thoracotomy
5. Anterior mediastinotomy
6. Rigid bronchoscopy
7. Fiberoptic bronchoscopy
8. Insertion of a chest drain
9. Needle thoracotomy (decompression)
10. Blunt enteric pleurodesis

ST4
1. VATS lung biopsy
2. VATS bullectomy and talc pleurodesis
3. VATS pleural biopsy and talc pleurodesis
4. VATS bullectomy and pleurectomy
5. VATS wedge excision
6. Thoracotomy and wedge excision
7. Hilif dissection and ligation of vessels
8. Fissure dissection and ligation of arteries
9. Bronchial dissection
10. Cervical mediastinoscopy

ST5
1. VATS mediastinal biopsy
2. VATS sympathectomy
3. VATS hilar dissection
4. VATS bronchial dissection
5. Rib fixation for fractures
6. Open lobectomy
7. Thyromectomy
8. Posterior mediastinal tumour excision
9. Open metastatectomy
10. Open decortication

ST6
1. VATS lobectomy
2. Open segmentectomy
3. VATS decortication
4. VATS giant bullaectomy
5. VATS lung volume reduction surgery (LVRS)
6. VATS thymectomy or mediastinal mass excision
7. Radical thymectomy
8. Removal of a foreign body in the bronchus
9. Ravitch procedure for a pectus deformity
10. Nuss procedure

ST7
1. Laser, cryo or argon beam ablation of an endoluminal tumour
2. Tracheobronchial stenting
3. VATS segmentectomy
4. Sleeve resection
5. Radical decortication for mesothelioma
6. Tracheal resection and reconstruction
7. Pancoast tumour resection
8. Chest wall resection and reconstruction
9. Retrosternal goitre excision
10. Resection of an infected lung cavity

ST8
1. Repair of an oesophageal perforation
2. Repair of a bronchopleural fistula
3. Diaphragmatic hernia repair
4. Removal of an infected diaphragmatic patch and reconstruction
5. Double sleeve resection
6. Lung cancer resection with SVC resection
7. Cerclage rib excision
8. Thoracoplasty
9. Lung cancer resection with spinal excision and reconstruction
10. Gooseneckectomy
SCTS Education Operative Video Prizes

Cardiac procedures

**ST3**
1. Saphenous vein harvest (ankle or thigh)
2. Radial artery harvest
3. Median sternotomy, pericardiotomy & thymic dissection
4. Internal mammary artery harvesting
5. Preparation for coronary bypass (aortic cannulation, venous cannulation, bicaval venous cannulation, antegrade cardiopulmonary bypass, reimplantation, retegrade cardiopulmonary bypass, insertion, placement of arterial / RSPV vents)
6. Weaning from CPB and decannulation
7. Placement of atrial and ventricular pacing wires
8. Placement of mediastinal and pleural chest drains
9. Systemic haemostasis
10. Sternal closure

**ST4**
1. Distal coronary anastomosis (including position of the heart & identifying the vessel)
2. Proximal coronary anastomosis (including assessing the length of the coronary bypass grafts)
3. Y or T-graft coronary anastomosis
4. OPCAB procedure
5. Aortotomy (transverse or I-shaped) & closure of the aortotomy
6. Greater curvature aortoplasty and closure
7. Excision of the aortic valve and debridement of the annulus prior to AVR
8. Sizing the aortic valve – intra-annular & supra-annular techniques
9. Implanting a prosthetic aortic valve (interruption)
10. Implanting a prosthetic aortic valve (semi-continuous)

**ST5**
1. Left atriotomy (standard, trans-septal or Dubost) & closure of the left atriotomy
2. Assessing the mitral valve – nerve hooks / saline test
3. Excision of the mitral valve prior to MV replacement
4. Implanting a prosthetic mitral valve
5. Mitral valve repair (triangular or quadrangular resection)
6. Mitral valve repair (Gortex neo-chordae implantation)
7. Mitral valve repair (sliding annuloplasty)
8. Right atriotomy & closure of the right atriotomy
9. Tricuspid valve annuloplasty & ring implantation
10. Tricuspid valve replacement

**ST6**
1. Atrial septal defect repair
2. Atrial myxoma resection
3. Atrial fibrillation surgery (pulmonary vein isolation, left atrial lesion set, right atrial lesion set, left atrial appendage excision)
4. Hemisternotomy AVR
5. Trans aortic TAVI
6. Redo sternotomy
7. Femoral arterial and venous cannulation
8. Aortic arch cannulation
9. Ascending aortic replacement
10. Bentall aortic root replacement

**ST7**
1. Repair of an acute type A aortic dissection
2. Repair of a post-infarction ventricular septal defect
3. Repair of a post-infarction LV free wall perforation
4. Excision of extensive mitral annular calcification
5. Pulmonary embolectomy
6. Percicardectomy
7. Pulmonary plication
8. Surgical ventricular restoration procedure
9. Explanting the heart for transplantation
10. Implanting the heart for transplantation

**ST8**
1. Valve sparing aortic root replacement (David or Yacoub procedure)
2. CABG procedure
3. Surgical repair of an aortic root aneurysm with an aortic homograft
4. Aortic arch replacement
5. Descending aortic repair
6. Repair of aortic transection
7. Repair of coarctation of the aorta
8. Pulmonary valve replacement
9. LV aneurysm closure
10. Placement of a central intra-aortic balloon pump

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Mitral valve reconstruction surgery

Presented by Joseph Zacharias
Consultant Cardiothoracic Surgeon, Blackpool Victoria Hospital

Cardiothoracic Webinar Series
2 October 2017 @ 08:30 BST
Repeated 2 October 2017 @ 20:00 BST
Register at www.rcsed.ac.uk/webinars
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Non-NTN Education

- Essential Skills in Cardiothoracic Surgery (ST2)
- Introduction to Cardiothoracic Surgery (CT/FY)
- Clinical Update Course
- Professional Development Course
- Wet-lab Course
- SCTS Education Ionescu Non-NTN Scholarship
- Non-NTN Database
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# MEDICAL WORKFORCE DATABASE

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Consultant Forename</th>
<th>Consultant Surname</th>
<th>Specialty</th>
<th>Sub-specialty 1</th>
<th>Sub-specialty 2</th>
<th>NTN surgical trainee Forename</th>
<th>NTN surgical trainee Surname</th>
<th>NTN surgical trainee ST level</th>
<th>Non-NTN Fellow</th>
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<tbody>
<tr>
<td>Papworth Hospital</td>
<td>Francis Wells</td>
<td>Stephen Large</td>
<td>Cardiac</td>
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<td>Mitral</td>
<td>Shakil Farid</td>
<td>Alia Noorani</td>
<td>ST8</td>
<td>Antonella Ferrara</td>
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<td>Samer Nashef</td>
<td>John Dunning</td>
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<td>Taufik Rajab</td>
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<td>SCTS Unit rep</td>
<td>Steven Tsui</td>
<td>David Jenkins</td>
<td>Cardiac</td>
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<td>Fouad Taghavi</td>
<td>Helen Weaver</td>
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<td>CD</td>
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<td>Narain Moorjani</td>
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<td>Udoo Abah</td>
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<td>Giusepe Aresu</td>
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<td></td>
<td>Transplant fellow</td>
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</table>
OUTSTANDING UNITS

- Essex Cardiothoracic Centre
- John Radcliffe Hospital
- Royal Stoke University Hospital
- Royal Victoria Hospital, Belfast
- Royal Sussex County Hospital, Brighton
- Nottingham University Hospital
- University Hospitals Coventry
- Glenfield Hospital, Leicester
- Barts Heart Centre
- Manchester Royal Infirmary
- Castle Hill Hospital, Hull
- Leeds General Infirmary
- Morriston Hospital, Swansea
- James Cook University Hospital, Middlesbrough
- University Hospital Wales, Cardiff
- Heartlands Hospital, Birmingham
AHP EDUCATION

- Surgical Care Practitioner Exam Revision Course
- Surgical Care Practitioner Courses
- Cardiothoracic Advanced Nurse Practitioner Course
- How to enhance nursing roles in Cardiothoracic Surgery
- Core Principles in Cardiothoracic Surgery Course (band 5/6)
- Theatre scrub nurse course
- Non-medical prescribing cardiac update course

- SCTS Education Ionescu Nursing & AHP Fellowship
MEDICAL STUDENT EDUCATION

- Medical Student Engagement Course (Sheffield)
- Medical Student Session (Belfast)
- Patrick Magee medical student poster prize
- RCS Ed Immersion programme (Middlesbrough)
- RSM & ASiT Careers Fairs

- Ionescu Medical Student Travelling Fellowship
THE FUTURE

• Continued evolution & long-term sustainability of courses

• Training the trainers course

• Consultant Education

• Multidisciplinary courses

• Advanced operative techniques video library

SCTS Education
• Education Secretaries – Narain Moorjani, Sri Rathinam
• NTN Education – Sunil Bhudia, Carol Tan
• Non-NTN Education – Maninder Kalkat, Uday Dandekar
• Medical Student Education – Aman Coonar
• AHP Education – Tara Bartley, Chris Bannister, Bhuvana Bibleraaj, Helen Munday, David Quinn, Steve Wooley
• Accreditation Lead – Mahmoud Loubani
• Communication Lead – John Butler
• Trainee Representatives – Jacob Chacko, Ahmed Al-Adhami
• Education Administrator – Letty Mitchell
THANK YOU

- Specialty Advisory Committee (SAC)
- Royal College of Surgeons of Edinburgh
- Training Programme Directors
- Course Directors & Faculty
- Industry

SCTS Education