



# ST4.1: Phase 2 Core Cardiac Surgery Course (ST4A)

Ashorne Hill  
Leamington Spa  
21<sup>st</sup> – 23<sup>rd</sup> November 2022

## Programme

### Course Directors

**Mr Gianluca Lucchese**  
Consultant Cardiac Surgeon  
Guy's and St Thomas' NHS Foundation Trust, London

**Mr Paolo Bosco**  
Consultant Cardiac Surgeon  
Guy's and St Thomas' NHS Foundation Trust, London

**Professor Attilio Lotto**  
Consultant Congenital Cardiac Surgeon  
Alder Hey Children's Hospital, Liverpool

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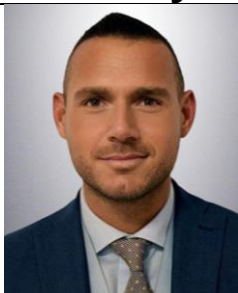


**Abbott**

## Faculty List

| Cardiothoracic Surgery Faculty     |   |
|------------------------------------|---|
| Mr Gianluca Lucchese               | Consultant Cardiac Surgeon<br>Guy's and St Thomas' NHS Foundation Trust, London               |
| Mr Paolo Bosco                     | Consultant Cardiac Surgeon<br>Guy's and St Thomas' NHS Foundation Trust, London               |
| Ms Alia Noorani                    | Consultant Cardiac Surgeon<br>King's College Hospital, London                                 |
| Dr Mitul Patel                     | Consultant Cardiac Anaesthetist<br>St Thomas's Hospital, London                               |
| Mr John Taghavi                    | Consultant Cardiac Surgeon<br>Royal Papworth Hospital, Cambridge                              |
| Dr Joon Lee                        | Consultant Cardiac Radiologist<br>Royal Sussex County Hospital, Brighton                      |
| Mt Shakil Farid                    | Consultant Cardiac Surgeon<br>Royal Papworth Hospital, Cambridge                              |
| Dr Christos Chamos                 | Consultant Cardiac Anaesthetist<br>St Thomas's Hospital, London                               |
| Congenital Cardiac Surgery Faculty |   |
| Mr Attilio Lotto                   | Consultant Congenital Cardiac Surgeon<br>Alder Hey Children's, Liverpool                      |
| Mr Shafi Mussa                     | Consultant Congenital Cardiac Surgeon<br>University Hospitals of Bristol NHS Foundation Trust |

### Faculty Bios:



**Mr Gianluca Lucchese** MD PhD was appointed consultant cardiac surgeon at St Thomas' Hospital in 2015. Before his recruitment to London, he trained in Siena (IT), Liverpool (UK) and Verona (IT), where he also undertook an academic post at the University Hospital.

He has extensive experience in all aspects of cardiac surgery, including congenital cardiac, transplantation and mechanical circulatory support. Over the last years, he has focused on maximizing his expertise on mitral and aortic valve repair surgery and complex aortic surgery with particular interest in the valve-sparing aortic root replacement. Also, he has pursued a specific interest in minimally invasive valvular surgery and trans-catheter valve implantation (such as TAVI), which have now become a consistent part of his surgical competences.

Research interests concentrate on the biochemical pathways of myocardial hypertrophy and myocardial protection, the hemodynamic properties of the aortic root (valve-sparing aortic root replacement, Ross operation) and the treatment of valvular heart diseases with particular attention to the isolated tricuspid valve dysfunction.



**Professor Attilio Lotto MCh** was appointed as a Senior Consultant at Alder Hey Children's Hospital in 2015. Soon after graduating at the University of Milan in Italy, he spent a year at the National Research Council developing his interest in research. During his surgical training, he came to the UK for two years working at the Bristol Heart Institute.

After having obtained the accreditation with the Royal College of Surgeons in 2002, Attilio started the cardiothoracic surgical training scheme in the UK at the Freeman Hospital and James Cook Hospital.

Since 2017, he has held a part time professorship at Liverpool John Moores University, running research programmes within the Liverpool Centre for Cardiovascular Science.

Attilio is actively involved in education and research with cardiothoracic societies: Congenital Educational Lead for the Society of Cardiothoracic Surgeon of Great Britain; Research Lead within the European Congenital Heart Surgeons Association and Database Lead for the World Society for Pediatric and Congenital Heart Surgery.

His surgical practice comprises of treatment for the whole spectrum of Congenital Cardiac Disease developing a particular interest in early one stage repair of congenital heart disease in neonates. He is also involved in the surgical treatment of Adult with Congenital Heart Disease (ACHD) at Liverpool Heart and Chest Hospital.



**Mr Paolo Bosco MD** was appointed consultant cardiac surgeon at St Thomas' Hospital in November 2016.

Paolo had an extensive training in Italy and UK in all aspects of adult cardiac surgery. He worked in several university hospitals in Italy, including Bologna, Turin, Rome and Catania. Paolo Moved in UK in 2008 and worked at Essex CTC, Papworth Hospital and St Thomas' Hospital.

Paolo developed a special interest in valve repair and he was trained by internationally recognized surgeons in Italy and the UK. Paolo has joined the mitral Team at St Thomas' following his substantive appointment

Paolo's research interests include mainly surgical revascularization and valve repair.



**Ms Alia Noorani** is a Consultant Cardiac Surgeon at King's College Hospital, London. She undertook her cardiothoracic training at Papworth Hospital, Cambridge and during this time undertook research towards an M.D in the imaging of aortic dissection. She has a specialist interest in aortic surgery and in cardiac surgical training. She lives in London with her two children and her husband, also a surgeon.



**Dr Joon Lee** went to medical school in Oxford and then Guy's and St. Thomas' in London. He completed surgical SHO rotations at the St. George's and Royal Brompton Hospitals in London. He then completed a PhD under the supervision of Professor Sir Magdi Yacoub at the Harefield Heart Science Centre before taking up radiology training at Brighton. Joon currently works in the Radiology Department of the Brighton and Sussex NHS Hospital Trust as the lead consultant in CT and Cardiac Imaging. Radiology qualifications include FRCR, SCMR (Level 2) and BSCI (Level2).



**Mr Christos Chamos** is a cardiothoracic anaesthetist based in London. He originally studied medicine and specialized in anaesthesia in Greece, before moving to the UK in order to undertake subspecialty training in cardiac anaesthesia. He has accomplished fellowships at Harefield and St George's and has worked at Papworth hospital as a locum consultant. Currently Christos works as a substantive consultant anaesthetist at Guy's and St Thomas' NHS Trust, where he has regular cardiac and thoracic lists, and is the departmental lead for transoesophageal echocardiography. His interests include enhanced recovery, echocardiography and medical education.



**Mr John Taghavi** undertook his undergraduate training at the University of Leeds graduating in 2005. Following his basic surgical training, he went on to train in cardiothoracic surgery at Royal Papworth Hospital. During his time in training he spent 18 months completing a research project at Stanford University, investigating the feasibility of cardiac donation after circulatory death, and obtaining an MD from the University of Leeds. He undertook an advanced surgical fellowship in pulmonary endarterectomy surgery and was appointed as a consultant at Royal Papworth Hospital in 2018. Mr Taghavi performs the full range of adult cardiac operation. His areas of interest include pulmonary endarterectomy surgery, aortic valve surgery (including TAVI), aortic surgery and coronary revascularization surgery.



**Mr Shakil Farid** qualified as a doctor from the University of Dhaka, Bangladesh. His specialist training in cardiac surgery was in Cambridge, London, Sheffield, Manchester and Brussels in Belgium. Mr Farid was appointed as a Consultant Cardiac and Aortic Surgeon at Oxford University Hospitals in 2018 following completion of cardiothoracic specialist training. He then joined Royal Papworth Hospital as a consultant surgeon in 2021. Mr Farid subspecialises in advanced aortic repairs along with complex aortic surgery and hybrid aortic surgery. Mr Farid has consistently performed at a very high level, which is represented by his excellent surgeon-specific mortality and outcome results. Mr Farid remains a strong advocate for patient-focused care and robust clinical governance to maintain the highest standards in cardiac surgery.



Dr Mitul Patel is a consultant cardiothoracic anaesthetist working at Guy's and St Thomas' NHS Foundation Trust. Mr Patel completed his training in anaesthesia in the South East London School of anaesthesia and following this undertook a fellowship in cardiothoracic anaesthesia and critical care at Auckland City Hospital, New Zealand. He is currently the lead for perioperative transoesophageal echocardiography and his other interests include medical education and perioperative medicine.

## Day 1

| <b>Monday 21<sup>st</sup> November 2022</b> |   |                                      |
|---|---|--------------------------------------|
| 08:30 – 08:50                               | Registration and coffee   |                                      |
| 08:50 – 09:00                               | Welcome and Introduction  | Mr Gianluca Lucchese/ Mr Paolo Bosco |
| 09:00 – 12:15<br>(Coffee 10:30 – 10:45)     | Rotation A (45min per session)  |                                      |
|   | 1. Principles of Mitral and Tricuspid valve surgery   | Mr Paolo Bosco                       |
|   | 2. Trans-esophageal echocardiography  | Dr Mitul Patel                       |
|   | 3. Perioperative management of the cardiac surgical patient   | Dr Christos Chamos                   |
|   | 4. Principles of redo surgery/ Intra operative measurement of graft flow  | Mr Shakil                            |
| 12:15 – 13:15                               | Lunch   |                                      |
| 13:15 – 14:00                               | 5. Cardiac computed tomography & magnetic resonance imaging   | Dr Joon Lee                          |
| 14:15 – 16:30                               | 6. Mitral valve wet-lab: <ul style="list-style-type: none"> <li>• Access &amp; assessment of the MV</li> <li>• Mitral valve repair</li> <li>• Mitral valve replacement</li> </ul> | All faculty                          |
| 16:30 – 16:45                               | Questions & Answers   | All faculty                          |
| 19:45                                       | Course dinner – Ashorne Hill  |                                      |

## Day 2

| <b>Tuesday 22<sup>nd</sup> November 2022</b> |  |                                      |
|--|--|--------------------------------------|
| 08:30 – 08:50                                | Registration and coffee  |                                      |
| 08:50 – 09:00                                | Welcome and Introduction   | Mr Gianluca Lucchese/ Mr Paolo Bosco |
| 09:00 – 11:30<br>(Coffee 10:30 – 10:45)      | Rotation B (45min per session)   |                                      |
|  | 7. Principles of pulmonary embolectomy / thromboendarterectomy   | Mr John Taghavi                      |
|  | 8. Cardiac tumors  | Ms Alia Noorani                      |
|  | 9. Principles of endocarditis surgery  | Mr Gianluca Lucchese                 |
| 11:30 – 12:00                                | 11. Graft quality verification in CABG: How to get it right.   | MEDISTIM & All faculty               |
| 12:00 – 13:00                                | Lunch  |                                      |
| 13:00 – 14:30                                | 12. Tricuspid valve wet-lab: <ul style="list-style-type: none"> <li>• Tricuspid valve repair</li> <li>• Tricuspid valve replacement</li> </ul> | All faculty                          |
| 14:30 – 14:45                                | Round up and Questions   | All Faculty                          |
| 15:30 – 16:30                                | Congenital Heart disease:<br>Fetal circulation, embryology and anatomy of simple lesion, physiology of shunts                                  | Mr. A Lotto                          |
| 16:30 – 17:00                                | Congenital heart disease:<br>Palliation vs complete repair   | Mr. A Lotto                          |
| 19:45  | Course dinner – Ashorne Hill   |                                      |

## Day 3

| <b>Wednesday 23<sup>rd</sup> November 2022</b> |  |                          |
|--|--|--------------------------|
| 08:30 – 09:30                                  | <b>Congenital Heart disease day</b><br>Surgery for Simple lesions:<br>PDA, Coarctation, ASDs, VSDs   | Mr A Lotto               |
| 09:30 – 10:30                                  | Surgery for more complex lesions:<br>Tetralogy, AV canal and TGA   | Mr A Lotto               |
| 10:30 – 11:30                                  | Single Ventricle and Fontan  | Mr R Kutty               |
| 11:30 – 11:45                                  | Coffee Break   |                          |
| 11:45 – 12:30                                  | Operative techniques in preparation of Wet Lab:<br>ASD closure<br>AV anulus patch enlargement<br>Ross Operation: Coronary buttons harvesting,<br>Pulmonary Autograft harvesting and<br>implantation, RV-PA conduit | Mr A Lotto<br>Mr R Kutty |
| 12:30 – 13:00                                  | Why and how to become a Congenital Cardiac Surgeon   | Mr R Kutty               |
| 13:00 – 13:30                                  | Lunch  |                          |
| 13:30–16:00                                    | Congenital cardiac surgery Wet Lab   | Mr A Lotto<br>Mr R Kutty |
| 16:00–16:30                                    | Questions, summary, close of course  | All                      |