

Visiting Professional Programme: Cardiology

Introduction

The Guy's and St Thomas' NHS Foundation Trust Cardiology Visiting Professional Programme (VPP) is designed to provide international visiting professionals with the opportunity to experience our highly acclaimed cardiology department first hand. The programme is a unique chance to be fully integrated within a cardiology service which is at the forefront of clinical activity, training and research; Guy's and St Thomas' is home to the UK's largest transcatheter structural intervention programme (TAVI, TVMR, Parachute, PFO, paravalvular leak closures), an advanced cardiac electrophysiology service with an XMR interventional laboratory performing both simple and complex EP procedures and pacemaker implantations and extractions, a full compliment of advanced cardiac imaging modalities (cardiac MRI, cardiac CT, nuclear cardiology and advanced echocardiography). Our additional marquee services include one of the largest inherited cardiac conditions and heart failure services in the United Kingdom and our Adult Congenital Heart Disease service. These provide tertiary level care to patients all over the South of England.

Research and training is incorporated within our clinical work, with our recent research activity including atrial fibrillation, heart valve substitutes, coronary physiology, cardiac pacing, bioengineering solutions for cardiac electrophysiology, fractional flow reserve by CT and computational fluid dynamics. Our cardiac consultants frequently contribute to publications, including journals and guidelines, and we are proud that our faculty's expertise is recognised nationally and internationally. As well as being the founding members of EuroPCR – London Valves the British Society of Echocardiography and the British Heart Valve Society, our faculty are regularly invited to participate at meetings for the Heart Rhythm Society, European Society of Cardiology, EuroPCR, Society of Cardiac Magnetic Resonance Imaging, Society of Cardiovascular Computed Tomography, EuroEcho – Cardiac Imaging, CSI – Frankfurt, British Society of Echocardiography, British Heart Valve Society and the British Cardiovascular Society.

Our Cardiology Department is divided into a range of services. These services are adult congenital heart disease, arrhythmia, heart failure, inherited cardiac conditions, interventional cardiology, cardiac imaging, structural intervention and valve disease. We offer specialised visiting professional programmes within all of our services for those that wish to hone their expertise in a specific cardiology area. Alternatively visitors may apply to rotate throughout our cardiology department and we even offer the opportunity for visitors to gain professional qualifications depending of the duration of their stay.

The programmes are designed by our clinical leads to provide unique development experiences which enable visiting professionals to broaden their clinical expertise and learn new skills that can be transferred back to their work place. We are excited to deliver exclusive access to observe and work alongside our renowned cardiology faculty and to provide an opportunity for international professionals to gain insight into our Trust and the role that cardiology consultants play within the NHS.

Who should attend?

This programme is intended for non U.K. advanced trainee clinicians, specialist registrars and consultants. Visitors have the choice of applying for a practical attachment or observership programme. Those wishing to apply for a practical attachment must have GMC registration. You can apply for GMC registration directly through the main GMC website (www.gmc-uk.org), alternatively The Royal College of Physicians run a medical training initiative which facilitates GMC registration and provides sponsorship for a Tier 5 visa. You can find out more about their Medical Training Initiative by visiting their website (www.rcplondon.ac.uk/education-practice/advice/medical-training-initiative).

Duration

We are able to offer visiting professional programmes for periods of 3 months up to 12 months. The programme's duration can be tailored to the specific learning requirements of those visiting the Trust.

Format

The cardiology programme is delivered within the hospital work place and it includes exposure to electrophysiology and heart failure clinics, inpatient ward rounds, multidisciplinary team meetings, and access to training courses depending on the length of programme that visitors request.

Visiting professional will be aligned with supervisors from within the clinical teams who will ensure that all of the learning and development needs and expectations are met. The supervisors will also ensure that visiting professionals are totally integrated in the day to day service within our cardiology team, regardless of the speciality and duration that visitors apply for.

We will also provide visitors with access to a multi-tiered support structure through receiving peer mentorship from the onset of their programme.

Overall Programme Aims

The programme is aimed at those who wish extend their clinical expertise in cardiology, and who wish to learn more about the treatment pathways and specialist technology within Guy' and St Thomas' NHS Foundation Trust.

Access to clinical research, such as our CT research program which is one of the largest in the UK, and the chance to actively contribute

Experience of the NHS and working in a tertiary cardiac centre with advanced clinical and technical expertise amongst an internationally renowned faculty of experts.

The programme aims to include:

Direct experience and exposure to clinics and ward rounds, including electrophysiology, heart failure, inherited cardiac conditions, adult congenital heart disease and valve clinics

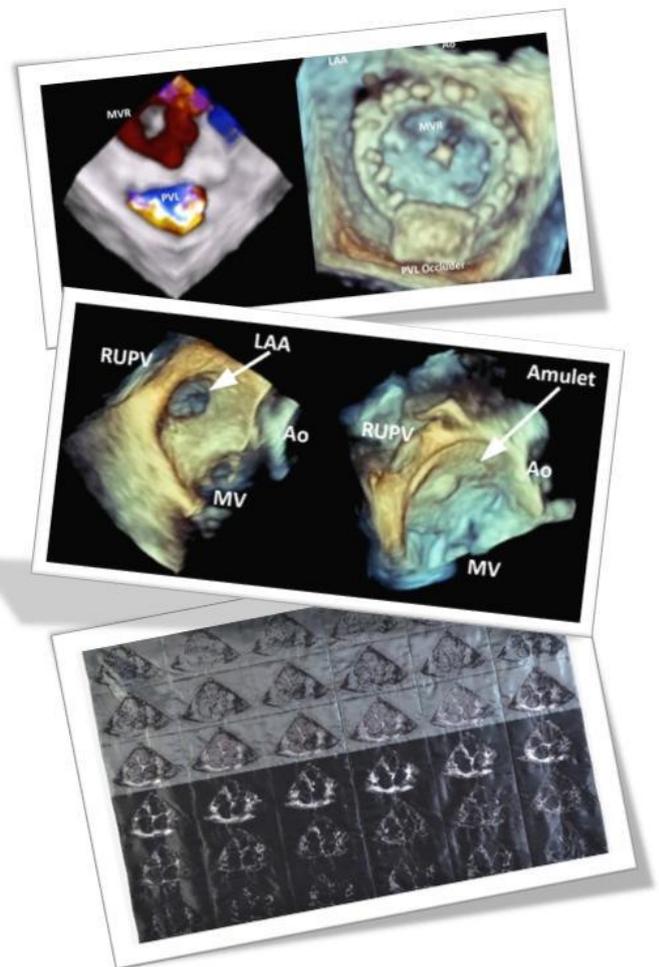
Participation in multidisciplinary team meetings

Advanced knowledge of non-invasive cardiology testing, including 3D echocardiography, cardiac MRI and CT

Access to monthly lectures and internally organised courses

Opportunities to receive bespoke training from our expert clinicians and to gain professional qualifications

The opportunity to create networks and close links for future learning and development through peer mentorship from junior and senior doctors



Sample General Cardiology Programme

Weeks 1 and 2	Monday	Tuesday	Wednesday	Thursday	Friday
08:00-09:00	Heart Failure meeting		Joint Cardiology Cardiac meeting -Or Morning report 8am		Echo meeting
09:00-12:00	Ward round with consultant and juniors	Ward round with Professor Redwood - Clinic	-Meet Dr Ronak Rajani -Ward round -Ward work	Ward round/ Specialist session	Ward round Heart Failure
13:00-14:00	Lunch	Lunch	Grand round	Cardiology Teaching	-FY1 teaching -FY2 teaching
14:00-17:00	Research admin	Ward work	Heart Failure ward round	-Clinic/Ward Work	-Clinic/Ward work

Week 3	Monday	Tuesday	Wednesday	Thursday	Friday
08:00-09:00	Heart Failure meeting		- Joint Cardiology Cardiac meeting -Or Morning report 8am		Echo meeting
09:00-12:00	Ward round	Dr Cooklin – Electrophysiology Clinic	Cardiac Cath Labs	Dr Wright - Electrophysiology Clinic	Ward round
13:00-14:00	Lunch	Lunch	Grand round	Cardiology Teaching	-FY1 teaching 12pm -FY2 teaching 1pm
14:00-17:00	Audit	Dr Kapetanakis - Heart Failure Clinic	Dr Rinaldi - Electrophysiology Clinic	Heart Failure clinic	Ward work

Week 4	Monday	Tuesday	Wednesday	Thursday	Friday
08:00-09:00	Heart Failure meeting		- Joint Cardiology Cardiac meeting -Or Morning report 8am		Echo meeting
09:00-12:00	Dr Perera Clinic	Cath labs	Ward round	Cath labs – Angiography	Ward round
13:00-14:00	Lunch	Lunch	Grand round	Cardiology Teaching	-FY1 teaching 12pm -FY2 teaching 1pm
14:00-17:00	Cardiothoracic theatres (surgery)	Ward work	Heart Failure ward round	Cath labs – Electrophysiology	Echo department

Expert Faculty

Adult Congenital Heart Disease

Dr Natali Chung - Consultant ACHD and pulmonary hypertension

Dr Catherine Head - Consultant ACHD and heart disease in pregnancy

Dr Christoph Kiesewetter - Consultant ACHD and MRI

Dr Alessandra Frigiola - Consultant ACHD and MRI

Dr Yaso Emmanuel - Consultant ACHD and MRI

Adult Congenital Heart Disease - Intervention

Professor Shakeel Qureshi - Consultant congenital interventional cardiologist

Dr Gareth Morgan - Consultant congenital interventional cardiologist

Professor Eric Rosenthal - Consultant congenital interventional cardiologist

Cardiac Electrophysiology and Pacing

Professor Jaswinder Gill – Consultant cardiologist

Professor Christopher Aldo Rinaldi - Consultant cardiologist and professor of cardiac electrophysiology

Professor Mark O'Neill - Consultant cardiologist and professor of cardiac electrophysiology

Dr Michael Cooklin - Consultant cardiologist

Dr Matthew Wright - Consultant cardiologist and electrophysiologist

Interventional Cardiology/Structural Intervention

Professor Simon Redwood - Honorary consultant cardiologist and professor of interventional cardiology

Dr Bernard Prendergast - Director of the cardiac structural intervention programme and consultant cardiologist

Dr Divaka Perera - Consultant cardiologist and reader in interventional cardiology

Dr Brian Clapp - Consultant cardiologist

Dr Jane Hancock - Consultant cardiologist and head of stress echocardiography and structural intervention imaging

Dr James Coutts - Consultant cardiologist, clinical director cardiovascular services

Dr Antonis Pavlidis - Consultant interventional cardiologist

Professor Michael Marber – Professor of Cardiology

www.guysandstthomasevents.co.uk

Heart Failure and Inherited Cardiac Conditions

Dr Gerry Carr-White - Consultant cardiologist - heart failure and inherited cardiac diseases

Dr Stamatis Kapetanakis - Consultant in heart failure and cardiac imaging

Dr Ronak Rajani - Consultant heart failure and cardiac imaging

Dr Adam McDiarmid – Consultant Heart Failure

Dr Leema Robert – Consultant Clinical Geneticist

Dr Michael Cooklin – Consultant Electrophysiologist

Dr Nicholas Gall – Consultant Electrophysiologist

Dr Laurence Nunn – Consultant Electrophysiologist

Cardiac Imaging (modality in parentheses)

Professor John Chambers – Professor of Clinical Cardiology (Advanced Echocardiography)

Dr Gerry Carr-White – Consultant Cardiologist (Echocardiography and cardiac MRI)

Dr Stamatis Kapetanakis – Consultant Cardiologist (Advanced Echocardiography)

Dr Jane Hancock – Consultant Cardiologist (Advanced Echocardiography)

Dr Ronak Rajani – Consultant Cardiologist (Advanced Echocardiography/Cardiac CT)

Dr Helen Rimington – Consultant Clinical Scientist (Echocardiography)

Dr Rebecca Preston – Consultant Radiologist (Cardiac CT)

Dr Arjun Nair – Consultant Radiologist (Cardiac CT)

Dr Amedeo Chiribiri – Consultant Cardiologist (Cardiac MRI)

Dr Tefil Ismail – Consultant Cardiologist (Cardiac MRI)

Dr Adam McDiarmid – Consultant Cardiologist (Cardiac MRI)

Valve disease/Endocarditis

Professor John Chambers – Professor of Clinical Cardiology (Advanced Echocardiography)

Dr Bernard Prendergast - Director of the cardiac structural intervention programme and consultant cardiologist

Dr Jane Hancock - Consultant cardiologist and head of stress echocardiography and structural intervention imaging

Dr John Klein – Consultant Microbiologist

Cardiology Service

Guy's and St Thomas' is home to a tertiary cardiovascular centre which provides a diverse range of services across Guy's and St Thomas', South East London and Kent. A key component of the centre is our renowned cardiology department, which uses multidisciplinary collaborations between cardiologists, surgeons, radiologists and geneticists to provide an extensive range of innovative treatments to cardiac in and outpatients.

Our cardiology department is made up of twelve clinical cardiac services which work together to provide continuity of care and one-stop clinics for patients; our core services are adult congenital heart disease, arrhythmia, cardiac rehabilitation, heart failure, inherited cardiac conditions, interventional cardiology, male cardiovascular health clinic, non-invasive testing, rapid access chest pain, stress echocardiography, structural intervention and valve disease.

Our services are at the forefront of clinical research and surgical devices due to our dedication to undertaking new studies with colleagues from across King's Health Partners. Some of our current research themes are the testing of replacement valves and the optimisation of timing for native valve surgery, young onset aortopathies, the electrophysiology team looking at advanced imaging in patients undergoing cardiac resynchronisation, and maternal and fetal outcome in women with coarctation of aorta.

Heart failure service

Our comprehensive heart failure service includes rapid assessment and diagnosis of patients with suspected heart failure and development of a comprehensive treatment management plans. We are one of the only services in the UK trialling new models for acute heart failure and we are the only cardiology service in the UK using parachute implants, a method which isolates the damaged muscle to enhance pumping efficiency.

The service runs a series of inpatient clinics, which receive approximately 500 new referrals per year, and outpatient clinics. The outpatient clinics include an elderly care clinic and a one stop heart failure clinic, which offer ECH, echocardiography, x-rays, blood tests, cardiopulmonary exercise testing and spirometry.

Inherited cardiac conditions (ICC)

Our ICC service is one of the largest in the UK and we cover all aspects of inherited cardiac diseases including aortopathies, neuromuscular disease, cardiomyopathies and rare metabolic disorders.

We also treat inherited heart rhythm conditions such as long QT syndrome, brugada syndrome and catecholaminergic polymorphic ventricular tachycardia. We treat and manage through cardiac condition clinics, aortopathy clinics, inherited heart muscle condition clinics, inherited cardiac arrhythmias clinics and neuromuscular conditions clinics. The clinics are supported by access to a range of testing services and facilities, such as an echocardiography service and cardiovascular imaging service.

Interventional cardiology

St Thomas' is one of the largest units in the country for invasive cardiology procedures and we are a centre for 24 hours primary angioplasty. We perform a wide variety of procedures including:

- coronary angiography
- coronary angioplasty
- mitral valvuloplasty
- rotational atherectomy
- laser angioplasty
- intravascular ultrasound
- pressure wire studies
- septal ablations
- trans-catheter aortic valve implantation

In 2013, the unit performed approximately 3,200 cardiac catheters and 1,000 angioplasties.

Non-invasive cardiology testing

Our non-invasive cardiology service provides test for patients prior to major surgery or with non-cardiac conditions, in 2015 alone we conducted 18,109 transthoracic studies and 763 transoesophageal studies. We are leading the way in education, training and influencing national policy, with full accreditation from the British Society of Echocardiography. Our service has the ability to provide the following tests:

- electrocardiogram
- exercise test
- echocardiogram
- cardiac event monitors
- 24 hour blood pressure monitors
- stress echocardiogram
- novacore R-test
- cardiopulmonary exercise testing
- transoesophageal echocardiogram
- cardiac computed tomography
- cardiac magnetic resonance imaging

We are also home to one of the largest cardiac CT units in the UK. Our CT team also provided procedural planning for the world's first 3 percutaneous mitral valve implantations and has subsequently provided assistance in devising international CT acquisition protocol for the FORTIS valve. We were selected to be the sole centre in England that undertakes a multicentre trial evaluating the role of FFRct for intermediate coronary lesions.

Rapid access chest pain clinic (RACPC)

The RACPC provides a specialist service for people who present to their GP with exertional chest pain suggestive of new onset angina or symptoms of cardiac ischaemia. We aim to see all patients within two weeks of being referred and the clinic is run by cardiology nurse specialists, a consultant cardiologist, and cardiac physiologists who perform and analyse the cardiac tests.

Structural intervention service

We have one of the largest structural interventional cardiology services within the UK and we are one of the leading centres in the world for transcatheter valve therapies, having performed the world's first three transcatheter mitral valve replacements in 2014.

Our structural intervention procedures are able to treat:

- conditions of the aortic, mitral or tricuspid valve which are deemed to be too high-risk for conventional major surgery (percutaneous valve interventions)
- atrial and ventricular septal defects that need to be closed (percutaneous ASD/VSD closure)
- leaking around prosthetic valves (paravalvular leak closure)
- atrial fibrillation (left atrial appendage occlusion)
- heart failure (parachute device implantation)

We also have a comprehensive service for evaluating patients who may be suitable for innovative intervention procedures to treat the following conditions:

Aortic stenosis (transcatheter aortic valve implantation) - We were one of the early adopters of this and we are one of the most experienced in the UK having performed over 600 procedures to date and currently undertaking approximately 180 per annum.

Mitral regurgitation (transcatheter mitral valve replacement) - We are one of only a few centres in the world with experience in implanting new mitral valves using a minimally invasive, transcatheter approach.

Patent foramen ovale (patent foramen ovale closure) - St Thomas' Hospital is one of only a limited number of commissioned services within London carrying out in excess of thirty procedures a year.

Paravalvular leaks (paravalvular occlusion service) - We are able to evaluate patients for these procedures using detailed clinical assessment and advanced cardiac imaging using 3D echocardiography and computed tomography.

Atrial fibrillation and inability to take blood thinning agents (left atrial appendage occlusion) - St Thomas' Hospital is one of only ten centres nationally commissioned for this procedure.

Heart failure (parachute device implantation service) - Complex acquired and congenital lesions (e.g. aortic and ventricular pseudoaneurysms and coronary fistulas)

Valve disease services

Our valve service deals with tertiary referrals and patients with documented valve disease of at least moderate grade, and it is comprised of an endocarditis service, a specialist multidisciplinary valve clinic, sonographer-led murmur clinic, and a transcatheter valve clinic. In 2015 we received an additional 281 referrals to our valve service and representatives from other cardiac centres have visited with the view of learning how to set up similar clinics.

Adult congenital heart disease (ACHD) service

The Guy's and St Thomas' congenital heart disease service provides care for patients from fetus to old age. Our ACHD unit works closely with all members of the cardiovascular department, this includes the paediatric cardiology service, obstetric service and other medical and surgical specialities to provide comprehensive patient care. In addition to ACHD clinics, we also provide specialist joint cardiac obstetric clinics and obstetric care.

We also run a pulmonary hypertension service as a shared care centre with the Royal Free Hospital which allows us to be one of the few Trusts in the UK that can start specific treatments for pulmonary hypertension. We offer screening clinics for patients that have suspected inherited arteriopathies or inherited connective tissue disorders, including Marfan syndrome and Loeys Dietz syndrome. Together with our interventional, surgical and electrophysiology colleagues we provide a comprehensive range of procedures including complex congenital cardiac surgical repairs, catheter intervention and hybrid procedures. The provision of cardiac rhythm management includes 3D mapping and ablation procedures.

The whole service is supported by advanced echocardiography, CT and MRI imaging, including the use of 3D printing to create models of patients' hearts, to aid diagnosis, procedure planning and procedures themselves with peri-procedural imaging.



Fees

A course fee per week will be applied. This excludes accommodation and travelling expenses. Participants will be provided with a certificate at the end of their attachment.

Registration and enquiries

To register for the Cardiology Visiting Professional Programme please complete the application form at www.guysandstthomasevents.co.uk and return to:

Events

Guy's and St Thomas' NHS Foundation Trust

vpp@gstt.nhs.uk

Telephone: + 44 (0) 20 7188 7188 extension 55865

Guy's and St Thomas' NHS Foundation Trust

Guy's and St Thomas' NHS Foundation Trust is one of the largest Foundation Trusts' in the UK. It consists of St Thomas' Hospital, Evelina London Children's Hospital and Guy's Hospital.

The Trust provides a full range of hospital services, as well as specialist services including cancer, cardiothoracic, women and children's services, kidney care and orthopaedics. Guy's is a major centre for cancer and renal services with the UK's largest kidney donor programme, and is also a leading centre for genetics, stem cell and allergy research and cleft lip and palate. St Thomas' is a leading centre for the treatment of cardiovascular disease, stroke, HIV and dermatology.

The Trust has one of the largest critical care units in the UK and one of the busiest A&E departments in London.

It has an annual turnover of £1.2 billion and employs 13,500 staff.

Last year, the Trust handled over 2 million patient contacts, including:

- 1.07m outpatients
- 85,000 inpatients
- 88,000 day case patients
- 192,000 accident and emergency attendances
- 859,000 in community services
- 6,847 babies delivered

The Trust has 665 beds at St Thomas', 288 at Guy's, 144 at the Evelina London Children's Hospital and 64 in the community.

NHS statistics show that our patient survival rates are nearly 25 per cent better than the national average. This is one of the lowest standardised mortality rates in the NHS and provides an important indication of the quality of care provided by our clinical staff.

In 2013, the Dr Foster Hospital Guide awarded us Trust of the Year for safe care.

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