CONGENITAL CARDIAC CENTRE

The University Hospital Southampton Congenital Cardiac Centre currently serves a population of approximately 3.5 million people living in the counties of Hampshire, Dorset, Wiltshire, West Sussex, Cornwall, Devon, Somerset, the Channel Isles and the Isle of Wight. Government figures project a considerable increase in population of this region in the next decade. British forces families stationed abroad are also referred to the unit. Occasionally patients with complex congenital conditions are referred from even further afield including Scotland and Ireland.

Integrated cardiac and cardiac surgical services are provided for all age groups and the centre is recognised for training in adult congenital heart disease, paediatric cardiology, adult cardiology and cardiac surgery. It is one of the major centres for fetal medicine and cardiology, neonatal and infant care, electrophysiology and adult congenital heart disease. Congenital heart disease surgery has been undertaken in Southampton for more than 35 years and there are consequently large numbers of adult patients with congenital lesions undergoing follow-up.

Southampton is a modern city on the South Coast of England with extensive cultural, recreational and sporting facilities. The New Forest, South Coast beaches and several internationally famous sailing centres are within easy reach of the hospital. There are surrounding picturesque villages and local housing and schools are superb making Southampton a highly desirable place to live and work. There are excellent road and rail links to London (just over 1 hour), an international airport with flights to Europe and other parts of the United Kingdom and fast sea crossings to France from nearby ports.

FACILITIES

In patients

The cardiac unit is an integrated facility situated on D and E level of the Southampton General Hospital and comprises 125 adult cardiology/cardiac surgical beds and a separate modernised children’s ward comprising 20 paediatric cardiology beds/cots in a child friendly refurbished ward.

Relatives of cardiac in-patients can stay at the adjacent Heartbeat Rotary House provided by the charity ‘Heartbeat’ which works to support the activities of the cardiac unit. Facilities are provided for mothers to be resident with their children on
the paediatric cardiology ward and a new Ronald McDonald House has opened within the grounds of the hospital for families.

Adult congenital patients are admitted to the Young Adult Cardiac Unit (YACU) on ward E2 which also has an area for more mature adult congenital patients and specialises in the care of patients with congenital heart conditions. Funded by a successful “High five” appeal, with the local charity Heartbeat in partnership with UHS, this newly refurbished unit provides a home from home for ACHD patients in a more age-appropriate environment including an innovative, state-of-the-art, architect-designed day room space. Patients of all ages with congenital heart disease are in adjacent areas further developing our theme of ‘integrated care’ from fetus to adulthood within the unit.

**Intensive Care**

There is a 16 bedded dedicated adult cardiothoracic intensive care unit led by specialised cardiac intensivists, many of whom are dual trained and provide anaesthesia for patients of all ages with cardiac disease. The paediatric cardiac patients are cared for in a purpose–built 14 bedded ‘level 3’ paediatric intensive care unit and there are separate high care facilities for adult medical cardiology, adult cardiac surgery, coronary care and paediatric cardiology. There are five Adult Cardiology High Care beds and a 10 bed Coronary Care Unit within which patients with unstable coronary syndromes, arrhythmias and acute decompensated heart failure are managed. A 6 bed cardiology assessment ward has recently opened (CCU-A) to allow triaging of cardiology patients, typically patients with chest pain. A further 10 bedded Fast Track Area accommodates routine postoperative patients which includes three beds for short-term ventilation. All the high care and intensive care areas lie in close proximity to each other, the cardiac catheter labs, cardiac imaging suite and cardiac operating theatres.

**Investigations**

There is a purpose built Non-Invasive Cardiac Unit with facilities for transthoracic and transoesophageal echo, exercise testing, ambulatory ECG, blood pressure monitoring, transtelephonic ECG, tilt testing, pacemaker and implantable defibrillator programming. The congenital heart disease service has several modern cardiac ultrasound machines including tissue Doppler and state of the art 3D echo facilities with echoes performed as part of the “one-stop” clinic visit. Two of the echo rooms are specifically designed and equipped for trans-oesophageal echocardiography and peri-operative TOE is provided routinely. All echo studies are digitally archived.

The cardiopulmonary exercise testing (CPET) service is run jointly with the anaesthetic service providing a wide range of expertise for interpretation and training in all aspects of CPET.

There are four modern, fully equipped, digital cardiac catheterisation rooms, one with biplane imaging, with quantitative angiography, intravascular ultrasound and Doppler pressure and flow wire facilities. Images are stored on a networked digital archive. Congenital cardiac catheterisation takes place on most days of the week. A
predominantly electrophysiological laboratory is equipped with a BARD Duolab recording system, together with the Endocardial Solutions™ (ESI) and Biosense CARTO™ mapping technologies. The catheter labs are situated in close proximity to the dedicated cardiothoracic operating theatres.

Cardiothoracic Radiology is integrated within the unit in close proximity to the non-invasive facilities and to the catheter laboratories, with dedicated Cardiac Magnetic Resonance Imaging and access to helical CT (two scanners). There are 4 consultant cardiothoracic radiologists providing a cardiothoracic on-call service.

The Department of Nuclear Medicine is adjacent to the cardiac unit and provides the full range of nuclear cardiology.

A close relationship exists between the Cardiothoracic Unit and the support services, in particular Nuclear Medicine, Microbiology and Cardiac Pathology.

Operating Theatres

There are four cardiothoracic operating theatres for cardiac patients of all ages.

Out patients

There is a dedicated Adult Cardiac Outpatients' Department with on-site echocardiographic facilities where adult congenital heart disease clinics take place. The paediatric cardiology clinics are held in the adjacent dedicated Children's Outpatients department where early transition clinics take place for the younger age groups prior to transferring to the adult area as part of the well-established "Ready, Steady, Go, Hello" program developed in Southampton.

Support Specialties

Southampton University Hospital is a fully functional Regional/Supra-regional University centre for both paediatric and adult medicine. There are many subspecialty services including respiratory medicine, genetics, obstetric care, GI, cancer medicine and the surgical specialties. Close liaison exists with adult cardiology, cardiac surgery, paediatrics (including the numerous regional specialist services) and with the general medical sub-specialities. Regular joint educational meetings are held with the congenital cardiologists, adult cardiologists, cardiac surgeons, paediatricians, neurologists and geneticists.

Fetal medicine with fetal cardiology, obstetrics and gynaecology, genetics and neonatology are located in the adjacent Princess Anne Hospital. There is a monthly multidisciplinary cardiac obstetric clinic with joint care of pregnant patients on both sites.

A full range of adult medical and surgical specialties is provided in this major university teaching hospital.
Nursing support and liaison

There are three Adult Congenital Heart Disease Liaison Nurses, one pulmonary hypertension nurse specialist and two Paediatric Cardiac Nurse Specialists. There are two EP Specialist Nurses who are involved with congenital patients of all ages with arrhythmias.

Research

The cardiothoracic unit encourages and promotes research activity within the department. Increasingly members of the Directorate are forming links with the Research Divisions of the Southampton University School of Medicine. Over 100 publications in peer reviewed international journals have been published by members of the cardiothoracic unit in the last 2 years. A copy of the Congenital Cardiac Centre research portfolio is available for inspection.

On the Southampton University Hospital site, there is an extensive range of research facilities including the Medical Research Council and Wellcome Research Units. Of particular note are the research departments of the fetal origins of cardiac disease under Professor Mark Hanson (BHF professor of cardiovascular science) and the genetic research laboratory headed by Professor David Wilson who has a special interest in the genetics of congenital heart disease. Professor Saul Faust heads the Wellcome Clinical Research Facility that has inpatient beds and outpatient facilities for clinical research.

It is hoped that with the continuing expansion of the Southampton University School of Medicine, there will be an opportunity in the future to make full-time academic appointments to support the unit’s clinical and basic science interests.

Activity of the Unit

Clinics:
Adult and paediatric congenital clinics at UHS take place on most days of the week with over 7000 appointments per year for the services. Paediatric clinics take place in twelve of our networked hospitals with adult clinics in the following local Networks: Plymouth, Channel Islands, Yeovil and Poole. Close liaison exists between the Congenital Heart Disease Team and the Cardiologists at each of the district hospitals attended.

Cardiac Surgery:
Over 2000 open heart operations are performed each year, with approximately 400 for patients with congenital heart disease including approximately 70 adults with congenital heart disease. One of the strengths of this unit is the availability of
carefully audited surgical results that compare favourably with anywhere in the world. These are available for inspection.

**STAFF**

**Congenital Heart Disease: Oxford-Southampton Clinical Network**

The Congenital Cardiology Departments at University Hospital Southampton and Oxford University Hospital work as a team, caring for patients within the South Central area and from referring hospitals throughout the region.

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Dr A Salmon</td>
<td>Consultant Congenital Cardiologist</td>
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<td>Dr J Gnanapragasam</td>
<td>Consultant Paediatric Cardiologist</td>
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<td>Dr K Roman</td>
<td>Consultant Paediatric Cardiologist</td>
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<td>Dr A Carroll</td>
<td>Consultant Adult Congenital Cardiologist</td>
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<td>Dr T Richens</td>
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<td>Dr T Bharucha</td>
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<td>Dr A Magee</td>
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<td>Dr N Hayes</td>
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<td>Dr S Fitzsimmons</td>
<td>Consultant Adult Congenital Cardiologist</td>
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<td>Dr L Smith</td>
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<td>Dr S Sadagopan</td>
<td>Consultant Paediatric Cardiologist</td>
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<td>Dr V Ramos</td>
<td>Consultant Adult Congenital Cardiologist (locum)</td>
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<td>Dr O Ormerod</td>
<td>Consultant Adult Congenital Cardiologist Oxford</td>
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<td>Dr S Adwani</td>
<td>Consultant Paediatric Cardiologist Oxford</td>
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<td>Dr E Orchard</td>
<td>Consultant Adult Congenital Cardiologist Oxford</td>
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<td>Dr E Szepesvany</td>
<td>Consultant Paediatric Cardiologist Oxford</td>
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**Cardiology:**

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<tr>
<td>Dr I Simpson</td>
<td>Consultant Cardiologist &amp; Interventionalist</td>
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<td>Dr A Calver</td>
<td>Consultant Cardiologist &amp; Interventionalist</td>
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<td>Dr P Roberts</td>
<td>Consultant Cardiologist &amp; Electrophysiologist</td>
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<td>Dr N Curzen</td>
<td>Consultant Cardiologist &amp; Interventionalist</td>
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<td>Dr P Cowburn</td>
<td>Consultant Cardiologist &amp; Heart Failure Specialist</td>
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<td>Dr A Yue</td>
<td>Consultant Cardiologist &amp; Electrophysiologist</td>
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<td>Dr D Rakhit</td>
<td>Consultant Cardiologist &amp; Echocardiologist</td>
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<td>Dr S Corbett</td>
<td>Consultant Cardiologist &amp; Interventionalist</td>
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<td>Dr J Wilkinson</td>
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<td>Dr A Flett</td>
<td>Consultant Cardiologist &amp; Heart Failure Specialist</td>
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<td>Dr B Shah</td>
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<td>Dr J Rawlins</td>
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<td>Dr M Mahmoudi</td>
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<td>Dr J Paisey</td>
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<td>Dr W Ullah</td>
<td>Consultant Cardiologist &amp; Electrophysiologist</td>
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Cardiac and Thoracic Surgery:

Mr S A Livesey  Consultant Cardiac Surgeon
Mr S Ohri  Consultant Cardiac Surgeon
Mr G Tsang  Consultant Cardiac Surgeon
Mr C W Barlow  Consultant Cardiac Surgeon
Mr T Velissaris  Consultant Cardiac Surgeon
Mr M Kaarne  Consultant Cardiac Surgeon (Adult and Paediatric)
Mr M Lavrsen  Consultant Cardiac Surgeon (Adult and Paediatric)
Mr N Viola  Consultant Cardiac Surgeon (Adult and Paediatric)
Mr M Chamberlain  Consultant Thoracic Surgeon
Mr E Woo  Consultant Thoracic Surgeon
Mr K Amer  Consultant Thoracic Surgeon
Mr A Alzetani  Consultant Thoracic Surgeon

Cardiac Anaesthesia:

Dr JMT Pierce  Consultant Anaesthetist
Dr G Charlton  Consultant Anaesthetist
Dr D Smith  Consultant & Senior Lecturer in Anaesthesia
Dr R Cope  Consultant Anaesthetist
Dr M Herbertson  Consultant Anaesthetist
Dr R Gill  Consultant Anaesthetist
Dr D Hett  Consultant Anaesthetist
Dr C Deakin  Consultant Anaesthetist
Dr P Diprose  Consultant Anaesthetist
Dr A Curry  Consultant Anaesthetist
Dr K Wilkinson  Consultant Anaesthetist

Cardiac Radiology:

Dr C R Peebles  Consultant Cardiothoracic Radiologist
Dr S Harden  Consultant Cardiothoracic Radiologist
Dr J Shambrook  Consultant Cardiothoracic Radiologist
Dr A Abbas  Consultant Cardiothoracic Radiologist

MIDDLE GRADE AND JUNIOR STAFF

Congenital Heart Disease:

1 Specialist Registrar in Adult Congenital Heart Disease-THIS POST
1 Senior Fellow in Adult Congenital Heart Disease

3 Specialist Registrars in Paediatric Cardiology
2 Rotating Specialist Registrars in Paediatrics
3 Trust Fellows in Paediatric Cardiology
4 CT1/2 in Paediatric Cardiology

**Adult Cardiology:**

9 Specialist Registrars (SpR)
2 Clinical Fellows in EP
1 Clinical Fellow in PCI
1 Clinical Fellow in Heart Failure
1 Clinical Fellow in Echocardiography

10 Senior House Officers/CT1/2

**DETAILS OF THE POST**

**Clinical Duties**

The Specialist Trainee will work in Adult Congenital Heart Disease under the supervision of Dr Aisling Carroll, Dr Tony Salmon, Dr Samantha Fitzsimmons, Dr Lindsay Smith and the team of congenital cardiologists. The congenital heart disease team assist in the post-operative care of congenital heart disease surgical patients and the Adult Congenital Specialist Trainee will also work under the supervision of the cardiac surgical consultants and cardiac intensivists.

Previous experience in adult congenital heart disease is not required but candidates should be able to demonstrate an interest in congenital heart disease. The post-holder will be given the required training in adolescent and adult congenital patient care, appropriate to his/her previous training experience, including the management of patients undergoing cardiac investigation and treatment including surgery.

Duties will include:

- General ACHD, pulmonary hypertension, inherited cardiac conditions, contrast and maternal cardiac outpatient clinics at UHS on rotation.
- Responsibility for the care of adolescent and adult patients undergoing cardiac investigation and treatment and for the medical aspects of those patients returning from cardiac surgery.
- Regular ward rounds as appropriate.
- Assessment of day case patients, in addition to the care of in-patients on the wards, the adult cardiothoracic intensive care units and some patients on the medical, obstetric and surgical wards.
- Presentation and discussion of ACHD clinical cases at the multi-professional MDT which is teleconferenced within the region.
- Participation in research and clinical audit within the unit.
- Sub-specialty training according to the trainee’s interests.
- Involvement in the training and supervision of junior medical staff on ward rounds, in theatre and in clinics, including the teaching of medical and nursing students.
- On-call duties as appropriate.

The Specialist Trainee will be required to undertake transthoracic and transoesophageal echocardiography with training in congenital heart disease provided. Training will be given in congenital cardiac catheterisation, pacemaker and arrhythmia management and electrophysiology in congenital heart disease. For those trainees with a paediatric background, non-congenital adult cardiology may be an important part of their training. There is a regular teaching programme consisting of case presentations, topic discussions, journal club and echo review meetings. Excellent opportunities are available for training in all aspects of congenital heart disease.

As a major university centre of excellence, the unit is at the forefront of research activity and the new postholder will be expected to actively participate in research and audit with dedicated time allocated for this.

**Study and Training**

There is a well-equipped postgraduate medical centre at UHS in the South Academic Block. There are educational activities almost every day for all groups of graduates at all stages of their careers. The Postgraduate Dean is based at Otterbourne in Winchester. Advice and information can always be obtained by appointment.

There is a Wessex Regional Medical Library service with a large branch in South Academic Block at Southampton General Hospital. A wide range of books and journals is housed there with remote access to the electronic library also available. Close to the Library at UHS is the Teaching Media Department which can always be called upon to help with all varieties of audio-visual aids in lectures and seminars and tutorials. There are regular cardiology study days for the Wessex region with bi-annual full study days dedicated to training in congenital heart disease, in addition to a program of half days for regional congenital teaching.

The trainee will be required to maintain a training record which will be countersigned by the educational supervisor to confirm the satisfactory fulfilment of the required experience, and the acquisition of the competencies enumerated in the specialty curriculum. The training programme will last a 2 year period.
Entry Requirements

No previous experience in adult congenital heart disease is required. The applicant should have completed ST3-ST5 training and obtained the MRCP or equivalent qualification in paediatrics or in medicine.

VISITING

Candidates are encouraged to visit and should contact Dr. Aisling Carroll (02381205942), Dr. Tony Salmon (02381206724), Dr. Samantha Fitzsimmons (02381206055) or Dr Lindsay Smith (02381206055) for further details of the training post.

Applicants will be reimbursed for the following interview expenses.

i. attendance for interview
ii. pre-interview visits for short-listed candidates only (maximum of two visits).

NOTE

Because of the nature of the work for which you are applying, this post is exempt from the provisions of Section 4(2) of the Rehabilitation of Offenders Act 1974 by virtue of the Rehabilitation of Offenders Act 1974 (Exceptions) Order 1975. Applicants are, therefore, not entitled to withhold information about convictions and, in the event of employment, any failure to disclose such convictions could result in dismissal or disciplinary action by the Trust. Any information given will be completely confidential and will be considered only in relation to an application for positions to which the order is applied.

A similar memorandum will also accompany requests for references.