General Paediatrics and Neonates and Paediatric Intensive Care
MTI Programme

Deanery - Yorkshire and Humber (South region)

Hospitals included in programme - Sheffield Children’s Hospital

Places available - 1

Duration of MTI programme - 24 months

Programme Details

<table>
<thead>
<tr>
<th>Hospital / Centre</th>
<th>Placement Name</th>
<th>Duration (Months)</th>
<th>Availability (Y/N)</th>
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<tbody>
<tr>
<td>1 Jessop Wing Regional NICU, Sheffield Teaching Hospitals</td>
<td>SHO Neonatal Intensive Care</td>
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<tr>
<td>2 Sheffield Children's Hospital</td>
<td>Registrar General Paediatrics</td>
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<td>3 Sheffield Children's Hospital</td>
<td>Registrar Paediatric Intensive Care</td>
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The successful candidate will undertake 6 months as a Senior House Officer at the busy Jessop Wing NICU to acclimatise to UK practices before undertaking 18 months as a registrar in Sheffield Children's Hospital.

If desired by the candidate, there is possibility 6 to 12 months of the general paediatric posts can be carried out at a local General Hospital to provide a combination of Paediatrics and Neonatal Care (either Doncaster Royal Infirmary or Barnsley DGH).
General Paediatric Registrar
Sheffield Children’s Hospital NHS Trust
Clinical supervisor- Dr Noreen West

This training programme will offer applicants placements at Sheffield Children’s Foundation NHS Trust in general and subspecialty paediatrics.

The programme may also include placements at one or more of the District General Hospitals in Doncaster or Barnsley if it suits the needs of the successful candidate.

Placements within the programme will be dependant on individual training requirements

Sheffield Children’s NHS Foundation Trust

Sheffield Children's NHS Trust has been providing care for the children and families of Sheffield and surrounding areas for over 125 years and became an NHS Trust in 1992. In August 2006, the Trust became the first dedicated Childrens Trust to achieve foundation status.

The Children’s Hospital is approximately one mile from the City Centre on the South-West aspect of Sheffield, close to the Royal Hallamshire Hospital and the Jessop Wing (Obstetrics/Neonates), the Charles Clifford Dental Hospital, Weston Park Radiotherapy and Oncology Hospital, the Medical School and the main University Campus.

During the last year there has been a considerable development and expansion of services, including a new Day Case Unit, a Dental Suite, a Burns Unit and a substantial office expansion. Currently the hospital supports about 150 beds. All paediatric in-patients in Sheffield are cared for at SCH.

There are 6 operating theatres, a procedure room used for the Exodontia service, a 10-bedded Post Anaesthetic Care Unit that has a 2-bedded direct discharge lounge and a 15-bedded Day Case Unit. A further operating theatre has been built to allow for further future expansion.

Surgical services involve general, urology, neonatal, orthopaedic (including spinal and limb reconstruction), plastic, burns, ENT, dental and neurosurgery. Currently there are 6 Consultant General Paediatric Surgeons and 6 Consultant Paediatric Orthopaedic Surgeons based at SCH.

Medical Services involve oncology, haematology (including bone marrow transplantation), respiratory, neurology, gastroenterology, hepatology, renal, metabolic, metabolic bone disease and immunological paediatrics. The hospital has a separate children’s Emergency Department which has about 45,000 new patients per year. SCH provides secondary paediatrics for the city which comprises about 20% of the population of North Trent.

Paediatric Medicine

The paediatric medical unit as a whole provides a general paediatric medical service, including intensive care. In addition a wide range of subspecialty services are offered. This includes bone disease, endocrinology, gastroenterology, hepatology (including post-transplant work), immunology and infectious disease, metabolic disease, nephrology (in conjunction with the renal service in Nottingham) and respiratory medicine (including cystic fibrosis).
The post is compliant with European Working Times Directive based on a partial shift rota, working 1 in every weekends on call as well as approximately 1 in 8 evenings/ nights.

The University Department of Paediatrics is housed in the Stephenson Unit adjacent to the Children's Hospital, together with laboratories and teaching facilities (lecture theatre, library, and seminar room). Research and clinical interests in the Department include Endocrinology, Gastroenterology, Cystic Fibrosis, Metabolism and Liver disease, Bone Disease, Respiratory Paediatrics, Neonatology, Community Paediatrics and Nutrition. Emphasis is placed on a multidisciplinary approach and there is active collaboration with the Departments of Obstetrics, Biomedical Science and Medical Physics in the University and the various NHS Departments in the Children's Hospital.

**Postgraduate Medical Education**

There is a high quality educational programme, which includes monthly day release sessions. There are separate programmes for Years 1-3 and Years 4-5 Specialist Registrars.

There is a weekly Postgraduate Meeting (Grand Round) on a Thursday.

APLS courses are run 3 times a year in Sheffield, PLS courses are run 4 times a year and NLS courses are run 8 times.

Audit meetings take place monthly and training in audit will be provided. Participation in audit projects is expected.

**Library Facilities**

The Illingworth Library provides facilities for all of Sheffield based NHS staff and University of Sheffield staff and students. With over 2500 books and 30 journals the library is the specialist resource for paediatrics in the Sheffield area. Opening hours are 9.00 am – 7.00 pm Monday to Thursday and 9.00 am – 5.00 pm on Friday. The library is linked to University and Sheffield Children’s Hospital Trust networks, which provide CD-ROM and Internet, access to medical resources such as Cochrane Library and Medline. Mediated searches are offered by library staff. Other facilities include PCs for Word, Excel and PowerPoint, printing, photocopying and inter-library loans.

**Study and Training**

All posts are recognised for postgraduate training. An educational supervisor is allocated to each trainee, regular appraisal meetings are undertaken together with interim assessments during each post. All trainees will develop a personal portfolio, which will include a personal learning plan, and information about experience gained, learning opportunities and evidence of progress.

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

Within Sheffield, a Grand Round is held weekly at the Children's Hospital. This is open to all paediatricians throughout North Trent.
SHEFFIELD CHILDREN'S NHS TRUST

FELLOW IN PAEDIATRIC CRITICAL CARE

Educational Supervisor: Jeff Perring

This is a 6 month fixed term post designed to provide training in Paediatric Critical Care including both intensive and high dependency care. It is intended for trainees at the level of ST3 or above in paediatric medicine.

Paediatric Critical Care Unit (PCCU)

The unit was one of the first set up in the United Kingdom. It is now on its third site in the hospital, completed in 1996. It has recently undergone a period of expansion to develop a separate High Dependency Unit which was completed in early 2009. The Intensive Care Unit consists of 10 physical bed spaces including 3 isolation cubicles whilst the High Dependency Unit consists of 9 physical bed spaces with a double isolation cubicle. The 2 units are adjacent to each other and bed spaces can be used interchangeably to meet patient needs. Beds on the Intensive Care Unit are used flexibly to meet the variation in need for intensive care between the winter and summer months. The critical care floor also contains the Neonatal Surgical Unit which has space for 9 cots. Neonatal surgical babies who require a period of ventilation are cared for by the neonatal surgical nurses on the high Dependency unit.

In 2009 there were 963 admissions to the Critical Care Unit resulting in just under 4200 days of care. The total number of patient bed days on the Critical care Unit has increased year on year.

Sheffield Children's Hospital Paediatric Intensive Care Unit is the Lead Centre for the old region of North Trent with a catchment population of approximately 450,000 children. It is a mixed unit and accepts children. The PCCU supports a wide range of surgical services including general, urology, neonatal, orthopaedic (including spinal surgery and limb reconstruction), plastic, ENT, dental and neuro- surgery. The Trust has a 4-bedded paediatric burns unit.

Medical services supported by the PCCU comprise oncology, haematology (including bone marrow transplantation), respiratory, neurology, gastroenterology, hepatology, renal, metabolic, metabolic bone disease and immunological paediatrics. The hospital has a separate children's emergency department that sees about 45,000 new patients per year.

Sheffield Children's NHS Foundation Trust also hosts Embrace, the Yorkshire and Humber Infant and Children's Transport Service that is responsible for both neonatal and paediatric transfers within the region. In its first year of full operation the service transferred in excess of 2000 infants and children.

Paediatric Intensive Care is multi-professional in nature and there is involvement of all appropriate medical and surgical specialities within the care of patients.

Training

The post holder will be able to gain a wide range of experience in paediatric critical care. In addition time may be spent in the operating theatres to gain additional experience in airway management and the use of anaesthetic agents as required. The PCCU is also supporting the development of simulation and the Trust has recently opened a Clinical Skills Centre which will be accessed regularly for Critical Care Training.

Practical training is given in:

- Basic and advanced airway techniques included oral and nasal intubation
- Ventilation by hand and different ventilatory techniques, volume controlled, pressure controlled
- High frequency oscillation and use of nitric oxide
- Non-invasive ventilation
- IV line insertion- Central Line and arterial line insertion
- Management of cardio-vascular shock
- Sedation and analgesia in intensive care
- CSA monitoring
- Neuro-intensive care
- CVVH
- Transport of the critically ill child
- Communication with parents
- Brain stem death criteria and withdrawal of care

**Educational activities**

Fellows will be allocated a consultant educational supervisor. There are regular teaching sessions:

- Weekly afternoon sessions on specific topics, including presentations by the trainees.
- Informal teaching on an ad hoc basis on the unit. This may include bedside or sit down session
- Theatre based anaesthetic training.
- Attendance at a training day at the Montague Simulator Centre and / or locally delivered simulation based training.

There is a weekly paediatric grand round for the whole hospital. ICU regularly takes the lead in this.

**Duties**

- Daily management of patients on the Critical Care Unit. The post holder will be responsible to the duty ICU or HDU consultant during normal working hours and to the on call Intensive Care consultant outside of this time. The PCCU operates within a philosophy of shared care with the admitting team.
- Attendance at daily handover, microbiology and x-ray ward rounds.
- Immediate management of the critically ill child
- Collection of national audit data for all admissions
- Participation in local audit

**A week on ICU**

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<td>Microbiology Round</td>
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A full shift working pattern is currently in operation, this is based on 11 (12) members of medical staff working a full shift. Three separate shifts exist (7 days a week):

- **Shift 1 Long day** 08:30 till 21:15
- **Shift 2 Short day (HDU)** 08:00 till 16:00
- **Shift 3 Evening** 20:30 till 09:15

This is flexible and subject to change.
Jessop Wing Neonatal Intensive Care Unit
Sheffield Teaching Hospitals NHS Foundation Trust
Educational Supervisor: Dr Porus Bustani

The post will be at Senior House Officer grade for 6 months to provide an opportunity to adjust to UK practises whilst being provided the opportunity to develop Neonatal Intensive Care Skills in what has been recognised by the GMC as one of the best training posts in the UK.

The Jessop Wing of the Royal Hallamshire Hospital contains the Regional Neonatal Intensive Care Unit. The unit has accreditation for higher specialist training in Neonatal Medicine and takes up to two Neonatal Grid Trainees. Approximately 7000 babies are born each year and there are facilities for 18 intensive care, 8 high dependency and 18 special care cots. There are 8 neonatal consultants who also work on a full shift system, 7 advanced nurse practitioners and a neonatal nurse consultant. All neonatal treatments are offered with the exception of cardiac and neonatal ECMO. Modes of respiratory support used are CPAP (including intermittent positive pressure support modes), conventional ventilation, volume guided, HFOV, and nitric oxide. Infants with congenital anomalies requiring urgent neonatal surgery are born and stabilised before transfer to the Children's Hospital. Frequent the post surgical care of the smallest babies is continued on the neonatal unit with close liaison of the surgeons.

Formal teaching occurs in 4 one hour teaching sessions per week on different topics, in some you will have the opportunity to prepare and present education material. There will also be the ability to conduct audit and research.

Clinical duties will rotate through a full shift system shared with by 12 doctors which is fully compliant with European Working Times Directive, during which you will work in the neonatal intensive care, high dependency, low dependency, provide the postnatal ward support for baby checks and transitional care. You will have the opportunity to attend clinics, which include neonatal follow up, developmental assessment, echocardiography, renal anomalies and socially vulnerable families.