Please find below programme information for the above subspecialty for training programmes starting in August/September 2011.

Page 2 contains a list of all submitted programmes of training; the job descriptions for each post follow on.

Applications for the NTN Grid open from 12noon Monday 6th September; closing at 12noon Monday 4th October. Applications can only be accessed during this period from the College website.

For more information on the grid process and to access the Grid Applicants Guide please visit: [http://www.rcpch.ac.uk/Training/NTN-Grid-Scheme](http://www.rcpch.ac.uk/Training/NTN-Grid-Scheme)

For specific subspecialty information, please contact:
Dr Christine Pierce
Email: christine.pierce@gosh.nhs.uk
Tel: 0207 813 8116

For further information which is not answered after consulting the website and Grid Applicant Guide, please contact:
Emma Jones
(NTN Grid Administrator)
Email: ntngrid@rcpch.ac.uk
Tel: 020 7092 6139
<table>
<thead>
<tr>
<th>Deanery</th>
<th>Programme of Training</th>
<th>Places available</th>
<th>Duration (Years)</th>
<th>Page</th>
</tr>
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<tbody>
<tr>
<td>London (North)</td>
<td>Great Ormond Street Hospital</td>
<td>2</td>
<td>2-3</td>
<td>3</td>
</tr>
<tr>
<td>London (South)</td>
<td>Evelina Childrens Hospital</td>
<td>2</td>
<td>2-3</td>
<td>5</td>
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<tr>
<td>Mersey</td>
<td>Alder Hey Children's NHS Foundation</td>
<td>2</td>
<td>2</td>
<td>7</td>
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<tr>
<td>North Western and Mersey Joint Rotation</td>
<td>Royal Manchester Childrens Hospital and Royal Liverpool Childrens Hospital</td>
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<td>2</td>
<td>10</td>
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<tr>
<td>Wessex</td>
<td>Southampton General Hospital</td>
<td>2</td>
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<td>14</td>
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<td>West Midlands</td>
<td>Birmingham Children’s Hospital</td>
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<td>2</td>
<td>17</td>
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<tr>
<td>West of Scotland</td>
<td>Royal Hospital for Sick Children, Yorkhill, Glasgow</td>
<td>1</td>
<td>2</td>
<td>20</td>
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<tr>
<td>Yorkshire and the Humber (West) and Mersey Joint Rotation</td>
<td>Leeds General Infirmary and Alderhey Children’s Hospital</td>
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<td>2</td>
<td>22</td>
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</table>
London Deanery (North)

<table>
<thead>
<tr>
<th>Hospital / Centre</th>
<th>Placement Name</th>
<th>Duration (Months)</th>
<th>Educational Supervisor</th>
<th>Compulsory (C) or Optional (O)</th>
<th>Availability Guaranteed (Y/N)</th>
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</thead>
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<tr>
<td>GOSH</td>
<td>PICM</td>
<td>24</td>
<td>Dr Christine Pierce</td>
<td>C</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Email: <a href="mailto:christine.pierce@gosh.nhs.uk">christine.pierce@gosh.nhs.uk</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Information

NORTH LONDON programme at GOSH for 24 months.

On completion of 24mnths PICM National Grid training, trainees who still have additional training time left before their CCT date, may apply to the London Training Programme Director (DR Ros Thomas) to be placed in the other PICM training centre at Evelina Childrens Hospital or an allied subspecialty post e.g. Royal Brompton Hospital, St Marys Hospital or a level 3 neonatal unit.
Outline of programme offered by this post:
Two year rotational programme rotating through the different ICU areas; NICU, PICU, CICU and CATS (Children’s Acute Transport Service), ICON (Intensive Care Outreach). All trainees will spend at least 6 months in CICU and 3 months in CATS during the 2-year rotation. Every effort will be made to match the type of rotation with the training needs of the individual.

Supervisors: Christine Pierce

Departmental Information:
Great Ormond Street is a paediatric tertiary referral hospital, with a full spectrum of paediatric subspecialties. The ICU is the lead centre for paediatric intensive care in North Thames. It is also one of the national ECMO centres and a transplant centre.

Activity / Workload:
The general intensive care area has 21 funded beds with approximately 2000 admissions per year. There are approximately 650 cardiac intensive care (8 beds) patients per year.

Clinical Training and Responsibilities:
Trainees will be expected to participate fully in the management of children in the intensive care areas. There is active support and comprehensive input from the consultant staff. The SPR’s are expected to participate in the consultant-led ward rounds, held twice daily. This will include presentation of patients at ward rounds, and in due course leading the ward rounds. Trainees will be expected to present clinical histories at meetings both within the department and in the hospital as well as at videoconferences. There are daily review and teaching meetings with the radiologists and regular meetings with the other subspecialties involved in the care of the patients on ICU. Attendance at the regular departmental clinical meetings is essential.

Non-Clinical Training and Responsibilities:
Trainees will be encouraged to participate in audit and research projects, with appropriate supervision. There is a regular research meeting to which Research and Audit projects are presented trainees are expected to attend and partake. Protocols for the management of a number of clinical problems are available and trainees will be encouraged to review these. Ethical meetings are held at regular intervals to discuss difficult issues. Videoconference link with Boston Children’s hospital to discuss clinical cases. M and M meetings are held at regular intervals trainees are expected to attend and present patients.

Particular Training Opportunities:
There is a modular weekly training program updated yearly by the consultants split into Year’s 1 and 2. The program is distributed to the trainees and is supported by bedside and consultant led teaching as well as monthly didactic and case led teaching sessions. Trainees will be expected to partake in this teaching. There is an active regional PICU retrieval service based at GOS with a specific training course. Trainees have the opportunity to obtain experience in this area. Courses are run within the department on various topics including ECMO, haemofiltration, transport etc. Numerous courses are held within the hospital and at the Institute of Child Health.
<table>
<thead>
<tr>
<th></th>
<th>Hospital / Centre</th>
<th>Placement Name</th>
<th>Duration (Months)</th>
<th>Educational Supervisor</th>
<th>Compulsory (C) or Optional (O)</th>
<th>Availability Guaranteed (YN)</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Evelina Childrens Hospital</td>
<td>PICM</td>
<td>24</td>
<td>Dr Ian Murdoch <a href="mailto:ian.murdoch@gstt.sthames.nhs.uk">ian.murdoch@gstt.sthames.nhs.uk</a></td>
<td>C</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Additional Information**

1. 24 mnths at Evelina Childrens Hospital from Sept 2011.
2. 24 mnths at Evelina Childrens Hospital from Sept 2011.

On completion of 24mnths National Grid training, trainees who still have additional training time left before their CCT date, may apply to the London Training Programme Director to be placed in the other PICM training centre at GOSH or an allied subspecialty post eg Royal Brompton Hospital, St Marys Hospital or a level 3 neonatal unit.
**Paediatric Intensive Care, Guy’s and St Thomas’ NHS Trust**

**Evelina Children’s Hospital**

**PIC Modules** start in March and September

**Consultants**
- Dr Ian Murdoch  PIC:HOS
- Dr Shane Tibby  PIC:Paed R&D Lead
- Dr Andrew Durward  PIC:IT Specilaist; Bronchoscopy Lead
- Dr Marilyn McDougal  PIC:Retrieval; Infection Control lead
- Dr Sara Hanna  PIC:Retrieval; SimulationTraining Lead
- Dr Shelley Riphagen  PIC:Retrieval (incl Air); Oncology Lead
- Dr Shyamala Moganasundram  PIC:Anaesthetic Lead, Postgrad Training
- Dr Paul James  PIC:Anaesthetic Liaison; Mandatory Training

**Nurse specialists**
- Fiona Lynch  Nurse consultant
- Louise Dewsbury  Matron PICU
- Jo Ward  Governance and Audit

**Rota**  Full shift leave incorporated with 20 participants

**Demographic Data** (per annum)

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<table>
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<tr>
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<tbody>
<tr>
<td>Total admissions:</td>
<td>1162</td>
</tr>
<tr>
<td>Cardiac surgery</td>
<td>301</td>
</tr>
<tr>
<td>Internal (non cardiac)</td>
<td>421</td>
</tr>
<tr>
<td>Total retrievals:</td>
<td>789</td>
</tr>
</tbody>
</table>

**Training and education objectives of this post**

1. Advance skills in paediatric resuscitation, stabilization and transfer
2. Develop understanding of assessment and support of critically ill child beyond neonatal period
3. Develop advanced skills to manage the critically ill child at a tertiary level
4. Increase knowledge of common pathways leading to critical illness in children and treatment modalities
5. Develop basic ability to oversee clinical management of a PICU and retrieval service
6. Develop and understanding of anaesthesia relevant to PIC medicine
7. Develop multidisciplinary teaching skills
8. Develop critical appraisal skills

**How these training and educational objectives will be achieved**

1. Care of PICU in-patients
2. Supervised retrieval of children referred for intensive care
3. Handling external referrals from initial contact through retrieval process and continuing intensive care management to discharge
4. Attendance at weekly retrieval review, journal club and ITPICM teaching (regular trainee presentations expected) and regular morbidity meetings and retrieval and simulator study days
5. Teaching medical students/ SHOs/ nursing staff/ specialist trainees
6. Supervised audit project or guideline development based on perceived unit need

**Other information**
The PICU contains 20 beds (including 7 post operative cardiac surgical beds). Three consultants cover each day, one exclusively for the unit, one for the retrieval service and one for clinical supervision. All trainees work on the unit and in the retrieval service with supervision appropriate for their experience.
### Hospital / Centre Placement

<table>
<thead>
<tr>
<th>Hospital / Centre</th>
<th>Placement Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Alder Hey Children's NHS Foundation</td>
<td>Paediatric Intensive Care</td>
<td>24</td>
<td><a href="mailto:Kate.parkins@alderhey.nhs.uk">Kate.parkins@alderhey.nhs.uk</a></td>
<td>c</td>
<td>y</td>
</tr>
</tbody>
</table>

**Additional Information**
Option for arranging additional out-of-programme Anaesthetic experience – there are strong links with 3 local Anaesthetic Departments. Alder Hey PICU trainees have successfully applied for 6-12 months Anaesthetic SHO posts for the last 5 years.
**Outline of Programme**
The trainee would be one of 4 NTN Paediatric Intensive Care trainees working in the department and be involved in the assessment and management of children with diverse problems on the PICU at Alder Hey. The PICU at Alder Hey is a mixed general and cardiac unit and admits approximately 1,100 patients per year. The post offers comprehensive training in paediatric intensive care, including resuscitation and advanced paediatric life support and the transport of the critically ill child. Practical skills related to the management of critically ill children are taught.

The PICM training programme includes weekly X-ray conference, Nutrition ward round (with Gastroenterology Consultant and Dietician), and twice weekly Microbiology ward round (with Microbiology and Infectious Diseases Consultants). The trainee is expected to participate in the weekly programme of lectures and tutorials on all aspects of paediatric intensive care. The department holds monthly journal club, mortality and critical incident meetings which are open to everyone from the multi-disciplinary team. There is a joint monthly Cardiac (including surgery), Anaesthetic, PICU teaching and bi-monthly video-conference with GOSH and BCH PICUs. In addition there is scenario training using high-fidelity mannequins both in-house and at our local high fidelity simulation centre which all trainees are encouraged to participate in. The rota includes experience as ‘chief’ which entails taking an overall management role for the Unit during the day, and senior (year 2) trainees are expected to support and supervise less experienced colleagues. There is allotted time for paediatric anaesthetic experience (in-house) or audit.

There are opportunities to gain Bronchoscopy experience both on the unit and with our colleagues in Respiratory Paediatrics, as well as experience in management of LTV patients. Full range of paediatric laboratory services.

The Mersey Deanery offers a substantial number of courses with regard to obtaining generic and management skills.

**Departmental Information**

- **Demographics**
  Alder Hey Children's NHS Foundation Trust is one of the largest and busiest children's hospitals in Europe. The Trust has a world class reputation and is an international centre of excellence, treating more than 200,000 children a year from 20 health authorities in North West, North Wales, Shropshire and Isle of Man.
  The hospital houses supra-regional cleft palate, and craniofacial departments. The PICU supports the full range of general and specialist Intensive Care including Paediatric Cardiac Surgery and post-cardiac surgery ECMO, neurosurgical, burns and major trauma, as well as oncology and post bone marrow transplant patients. Alder Hey also has the busiest paediatric A&E department in the UK.
  Alder Hey Children’s NHS Foundation Trust is designated as a Lead Centre for Paediatric Intensive Care in the North West and has 22 beds with an additional separate 12-beded High Dependency and Transitional Care (for LTV patients) Units. Approximately 92% of admissions to PICU are intubated and ventilated. It admits approximately 1,100 patients per year. Around 40% of admissions are cardiac, 40% medical and 20% are surgical (paediatric, neurosurgical, neonatal, orthopaedic, craniofacial, trauma, and plastic – including burns).
  Physicians and surgeons share care with the intensive care staff while their patients are in the ICU. The management of the patient is directly co-ordinated by the intensive care consultants.

- **Team**
- **Consultant Staff**
- Full-time in Intensive Care: Part-time in Intensive Care:
  - Dr. S. Kerr (Director Critical Care)  Dr. F. Potter (Anaesthetics)
  - Dr. K. Thorburn  Dr. P. Baines (Research/Ethics)
  - Dr M Horan  Dr. A. Selby (Long-term Ventilation)
  - Dr. J. Ratcliffe  Dr.K.Parkins (Clinical Lead Regional Transport Team)
  - Dr S Mahoney (locum)
- Associate Specialist
  - Dorothea Sidaras
- Advanced Nurse Practitioners in Critical Care
  - Andy Darbyshire (Nurse Consultant)
  - Gerri Sefton & Pauline Holt
- 10 trainees (ST4 or above) are based on PICU full-time, which includes 4 NTN PICU trainees
  + 5 WTE Anaesthetic trainees (ST5 or above) who rotate between PICU and theatre.
- 2 dedicated PICU Pharmacists
- PICU Physiotherapy team - 3 senior physiotherapists (permanent) plus rotating staff
- PICU Nursing educational team - 4 nursing staff - PICU course run annually
- PICU Research Team - 2 permanent members of staff plus 2 WTE nursing staff to support trials in unit
- Supervisor(s)
  - Drs S Kerr, J Ratcliffe, P. Baines, A Selby, F Potter, K Thorburn, K Parkins, M Horan and S Mahoney

**Clinical Training Responsibilities**

Alder Hey is recognised by the Intercollegiate Committee for Training in Paediatric Intensive Care Medicine (ICTPICM) as providing full training in this sub-specialty. There will be the opportunity to spend 25% of 2 year NTN training post with the new regional Paediatric Intensive Care Transport team (once established). The ICPICM syllabus is followed, with competency based assessments incorporated.

**Workload / Rota Arrangements / Example Timetable**

The rota is a resident full shift system that is fully compliant with the EWTD 48 hours per week guidelines. There are three trainee medical staff on duty at all times, one of whom is an anaesthetist. The post carries Band 1A supplement.

**Non Clinical Training Responsibilities (expectations of research / audit / teaching)**

The Intensive Care Unit offers facilities for clinical research and there is an active research programme. The department currently is participating in both national (CHIP and SLEEPS, and due to participate in others) and regional trials (fully funded with research nurse and clinical fellow). Trainees would be expected to complete training in ‘Good Clinical Practice’ and participate in recruitment to trials. The appointee will be encouraged to undertake an audit or research project and recent trainees have successfully submitted abstracts to International meetings. Attendance at local and national postgraduate courses, and meetings on transport medicine and paediatric intensive care, will be actively encouraged. There are excellent postgraduate facilities at the Alder Hey.

**Further training opportunities**

Respiratory department links to support training in bronchoscopy skills. The department also has strong links with 3 local Anaesthetic Departments and has successfully supported PICU trainees in their application for Anaesthetic SHO posts to fulfill this part of their training for at least the last 5 years.

**Any further information**

Contact Dr S Kerr, Dr F Potter or Dr K Parkins for further information - Secretary:Tel. 0151-252 5555
Email: steve.kerr@alderhey.nhs.uk; frank.potter@alderhey.nhs.uk; kate.parkins@alderhey.nhs.uk

**Contact details for unit**

Paediatric Intensive Care Unit,
Alder Hey Children's NHS Foundation Trust
Eaton Road, Liverpool, L12 2AP

**Curriculum**

Each subspecialty grid programme covers the RCPCH curriculum as specified on the RCPCH website: [http://www.rcpch.ac.uk/Training/Competency-Frameworks](http://www.rcpch.ac.uk/Training/Competency-Frameworks)
## North Western and Mersey Deanery

### Hospital / Centre Placement Name Duration (Months) Educational Supervisor Compulsory (C) or Optional (O) Availability Guaranteed (Y/N)

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<tr>
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<th>Hospital / Centre</th>
<th>Placement Name</th>
<th>Duration (Months)</th>
<th>Educational Supervisor</th>
<th>Compulsory (C) or Optional (O)</th>
<th>Availability Guaranteed (Y/N)</th>
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<tr>
<td>1</td>
<td>Royal Manchester Children's Hospital</td>
<td>PICU</td>
<td>12</td>
<td>Dr PM Fortune, <a href="mailto:peter-marc.fortune@cmft.nhs.uk">peter-marc.fortune@cmft.nhs.uk</a></td>
<td>C</td>
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<tr>
<td>2</td>
<td>Royal Liverpool Children's Hospital</td>
<td>PICU</td>
<td>12</td>
<td></td>
<td>C</td>
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### Additional Information

1st year at Royal Manchester Children's Hospital Paediatric Intensive Care Unit (general intensive care, transport medicine and theatre experience)
2nd year at Royal Liverpool Children's Hospital Paediatric Intensive Care Unit (cardiac and general intensive care, transport experience).

Educational supervisor may change on allocation.
Specialist training advisor (PICU) for Manchester - Dr JM Samuel
Transport experience would include secondment for allocated shifts from base hospitals, to the regional paediatric transport service once established.
National Grid Training Programme in Paediatric Intensive Care Medicine: Joint Rotation Royal Manchester and Royal Liverpool Children’s Hospital.

Introduction:
This programme consists of a 2 year rotation starting with 1 year at the Royal Manchester Childrens hospital covering general paediatric intensive care with burns and metabolic medicine, followed by a year at the Royal Liverpool Childrens with a focus on paediatric cardiac intensive care in addition to general intensive care. Broad experience is gained in working within 2 large units with different demographics. This programme is particularly attractive to those wishing a wider exposure of practice within the UK.

Royal Manchester Childrens Hospital: (Year 1 of 2)
Director: Dr PM Fortune
This new purpose built unit has a capacity of 17 staffed beds, and a separate adjacent 15 bedded high dependency unit, is contiguous with the regional burns unit with an additional 2 intensive care beds, and is the lead centre for a diverse referring population as well as supporting the largest single site children’s hospital in the UK with 371staffed beds. Facilities are within the critical care area comprising the theatre suite, burns, HDU. The children’s hospital is contiguous with the St Mary’s Hospital with regional neonatal services, as well as the Manchester Royal Infirmary with specialist services including adult congenital heart surgery with easy access to other clinical services. The hospital houses the supra-regional metabolic, cleft palate, bladder extrophy and spinal services. The PICU supports neurosurgical, burns and major trauma, as well as oncology and post bone marrow transplant patients, in addition to covering the emergency department. The unit averages around 700 admissions a year, with around 200 retrievals. There will be a regional retrieval service in operation covering the North West and North Wales region serving Manchester and Liverpool, and a total of 6 month retrieval experience in the 2 year programme will be offered.

STAFFING
There are 12 medical staff on the core rota, comprising 3 registrars including the grid trainee, anaesthetic (ST 4 and above) and paediatric emergency medicine trainees (ST7), as well as clinical fellows. In addition to this there are 2 advanced practitioners that run on a separate rota with an additional 3 to join shortly. The rota is remains fully compliant with a full shift pattern. There are 8 full time consultants.

TRAINING
There is a strong educational component to the post, and a sample of the weekly educational schedule follows:

<table>
<thead>
<tr>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>10:00 - 11:00 ICU meeting</td>
<td>13:00 - 14:00 Patient Management Scenario and simulation scenarios</td>
<td>12:00-12:30 radiology meeting</td>
<td>11:30 - 12:30 Tutorial</td>
</tr>
<tr>
<td>12:30 - 13:30 ICU Update Critical incidents (monthly)</td>
<td>12:30 - 13:30 Grand Round</td>
<td>12:30 - 13:30 combined Infectious Diseases w/r</td>
<td></td>
</tr>
<tr>
<td>14:00 - 15:00 Mortality and morbidity (monthly)</td>
<td>14:00 - 14:30 Palliative Care Round</td>
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</tbody>
</table>

Teaching also occurs on the twice daily ward rounds, and is supported by intranet based resources and simulation. The ICTPICM syllabus is followed, with competency based assessments incorporated. Trainees are also expected to present at these activities.

RESEARCH
There are opportunities for audit and research within the unit, and active participation within multicentre trials are encouraged. Current ongoing studies are the control of hyperglycaemia in PICU (CHiP), RCT of sedation practice (SLEEPs), as well as departmental projects examining central venous line infections (Matching Michigan), use of procalcitonin assays, failed extubations, reducing medication errors. The department also has close links with the MCRN as well as collaboration with Manchester University in the MIMIT project (Manchester: Integrating medicine and innovative technology). The new Wellcome Trust Children’s Clinical Research Facility (WTCCRF) is the first specialist paediatric clinical trials unit in the North West and one of only four in the UK.

CONTACT: Please contact Dr J Samuel or Dr S Playfor (clinical lead) for further information
Subspecialty: Paediatric Intensive Care Medicine

Base Unit: Paediatric Intensive Care Unit at Alder Hey Children's NHS Foundation Trust

Deaneries involved: Mersey

Outline of Programme
The trainee would be one of 4 NTN Paediatric Intensive Care trainees working in the department and be involved in the assessment and management of children with diverse problems on the PICU at Alder Hey. The PICU at Alder Hey is a mixed general and cardiac unit and admits approximately 1,100 patients per year. The post offers comprehensive training in paediatric intensive care, including resuscitation and advanced paediatric life support and the transport of the critically ill child. Practical skills related to the management of critically ill children are taught.

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There are opportunities to gain Bronchoscopy experience both on the unit and with our colleagues in Respiratory Paediatrics, as well as experience in management of LTV patients. Full range of paediatric laboratory services.

The Mersey Deanery offers a substantial number of courses with regard to obtaining generic and management skills.

Departmental Information
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  Alder Hey Children's NHS Foundation Trust is one of the largest and busiest children's hospitals in Europe. The Trust has a world class reputation and is an international centre of excellence, treating more than 200,000 children a year from 20 health authorities in North West, North Wales, Shropshire and Isle of Man.
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  Alder Hey Children’s NHS Foundation Trust is designated as a Lead Centre for Paediatric Intensive Care in the North West and has 22 beds with an additional separate 12-bedded High Dependency and Transitional Care (for LTV patients) Units. Approximately 92% of admissions to PICU are intubated and ventilated. It admits approximately 1,100 patients per year. Around 40% of admissions are cardiac, 40% medical and 20% are surgical (paediatric, neurosurgical, neonatal, orthopaedic, craniofacial, trauma, and plastic – including burns).
  Physicians and surgeons share care with the intensive care staff while their patients are in the ICU. The management of the patient is directly co-ordinated by the intensive care consultants.
- Team
- Consultant Staff
- Full-time in Intensive Care: Part-time in Intensive Care:
  Dr. S. Kerr (Director Critical Care) Dr. F. Potter (Anaesthetics)
  Dr. K. Thorburn Dr. P. Baines (Research/Ethics)
  Dr M Horan Dr. A. Selby (Long-term Ventilation)
  Dr. J. Ratcliffe Dr.K.Parkeins (Clinical Lead Regional Transport Team)
  Dr S Mahoney (locum)
- Associate Specialist
- Dorothea Sidaras
- Advanced Nurse Practitioners in Critical Care
- Andy Darbyshire (Nurse Consultant)
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- PICU Research Team - 2 permanent members of staff plus 2 WTE nursing staff to support trials in unit
- Supervisor(s)
  Drs S Kerr, J Ratcliffe, P. Baines, A Selby, F Potter, K Thorburn, K Parkins, M Horan and S Mahoney

**Clinical Training Responsibilities**
Alder Hey is recognised by the Intercollegiate Committee for Training in Paediatric Intensive Care Medicine (ICTPICM) as providing full training in this sub-specialty. There will be the opportunity to spend 25% of 2 year NTN training post with the new regional Paediatric Intensive Care Transport team (once established). The ICTPICM syllabus is followed, with competency based assessments incorporated.

**Workload / Rota Arrangements / Example Timetable**
The rota is a resident full shift system that is fully compliant with the EWTD 48 hours per week guidelines. There are three trainee medical staff on duty at all times, one of whom is an anaesthetist. The post carries Band 1A supplement.

**Non Clinical Training Responsibilities (expectations of research / audit / teaching)**
The Intensive Care Unit offers facilities for clinical research and there is an active research programme. The department currently is participating in both national (CHIP and SLEEPS, and due to participate in others) and regional trials (fully funded with research nurse and clinical fellow). Trainees would be expected to complete training in ‘Good Clinical Practice’ and participate in recruitment to trials. The appointee will be encouraged to undertake an audit or research project and recent trainees have successfully submitted abstracts to International meetings. Attendance at local and national postgraduate courses, and meetings on transport medicine and paediatric intensive care, will be actively encouraged. There are excellent postgraduate facilities at the Alder Hey.

**Further training opportunities**
Respiratory department links to support training in bronchoscopy skills.
The department also has strong links with 3 local Anaesthetic Departments and has successfully supported PICU trainees in their application for Anaesthetic SHO posts to fullfill this part of their training for at least the last 5 years.

**Any further information**
Contact Dr S Kerr, Dr F Potter or Dr K Parkins for further information - Secretary:Tel. 0151-252 5555
Email: steve.kerr@alderhey.nhs.uk; frank.potter@alderhey.nhs.uk; kate.parkins@alderhey.nhs.uk

**Contact details for unit**
Paediatric Intensive Care Unit,
Alder Hey Children's NHS Foundation Trust
Eaton Road, Liverpool, L12 2AP

**Curriculum**
Each subspecialty grid programme covers the RCPCH curriculum as specified on the RCPCH website:
http://www.rcpch.ac.uk/Training/Competency-Frameworks
## Additional Information

This rotation will provide a 2 year comprehensive training programme in Paediatric Intensive Care Medicine. The PICU provides facilities for the paediatric cardiology and cardiac surgical programme, regional paediatric trauma, neurosurgery, neonatal and paediatric surgery, as well as general and specialist paediatric medical emergencies. The latter include haematology and oncology, neurology, nephrology, allergy and respiratory disease. There is a comprehensive range of specialist support services. We also provide a Retrieval service for the region. It may be possible to organise out-of-programme anaesthesia experience at other hospitals in the Wessex region.
The PICU at Southampton is a multi-disciplinary PICU and the principle referral unit for the population of Wessex. The Unit currently has 11 staffed beds but is expanding to 16 by September 2011. The PICU has a high patient throughput with approximately 850 admissions per annum. We provide facilities for the paediatric cardiology and cardiac surgical programme (35% of the admissions), trauma, neurosurgery, neonatal and paediatric surgery, as well as general and specialist paediatric medical emergencies. The latter include haematology and oncology, neurology, nephrology, endocrine, allergy and respiratory medicine. We also provide a 24 hour regional retrieval service that transports approximately 250 children per year. There is a comprehensive range of specialist support services. It may be possible to organize out-of-programme anaesthesia experience in local hospitals.

**Consultants**
- Dr I Macintosh   Head of Department
- Dr M Marsh  Medical Director SUHT
- Dr P Wilson  Care Group Lead : Child Health
- Dr J Pappachan  Lead for Research
- Dr K Sykes  Lead for Education
- Dr G Jones  Lead for Transport
- Dr A Ramakrishnan Lead for Clinical Practice
- Dr Vanessa Stanley Lead for Risk

**Job Plan**
- Twice daily multi-disciplinary ward round
- Co-ordination of all aspects of patient care on the unit; including routine ward duties, routine and emergency admissions to the unit and outreach to the Paediatric services.
- Undertaking Paediatric retrievals
- Monthly Morbidity and Mortality, Research and Clinical Practice meetings

**Training and Research**
The PICU runs a programme of monthly whole day training seminars and bimonthly registrar led tutorials. Training and experience in the principles of transport of critically ill children will also be obtained. An active teaching programme exists within the hospital, which includes weekly Paediatric Grand Rounds, Research Grand Rounds and regular sub-specialty seminars.

Candidates will be encouraged to participate in PICU based research/audit during their appointment. The department maintains a high level of academic activity and recent projects have included:
- Acute Lung Injury
- Genetics and Sepsis
- Use of early decompression and tissue brain oxygenation monitoring in severe brain injury
- Cardiac output monitoring
- Mothers and Fathers Studies
- Participation in national studies including CHIP and STEPS

Within the educational framework described above, the trainee will be exposed to, and gain proficiency in a wide variety of therapeutic interventions as well as critical care monitoring and system support techniques in infants and children of all ages.

**Working Pattern**
The unit is staffed by 5 ST1-3s, 2 Grid Trainees, and 5 ST4-9s rotating from Paediatric or Anaesthesia backgrounds. Shifts for intensive care trainees will be exclusively on the PICU and working hours will be within current task force guidelines. The rota allows for a minimum of 2 to 3 trainees to cover the PICU during normal
working hours, with 2 trainees present at all other times. There are obligatory periods of night duty, with appropriate compensatory rest. Comprehensive support is provided by the Consultants.

**Contact**

All enquiries and requests for visits should be addressed to Dr Kim Sykes (kim.sykes@suht.swest.nhs.uk) or Dr Iain Macintosh (iain.macintosh@suht.swest.nhs.uk) by email or via the unit 02380706972.
### Additional Information

There is an option for those who have not completed a training placement in anaesthesia to undertake 6-12 months of general anaesthesia at a West Midlands hospital. Every trainee will spend 4-6 months of the 24 month programme working within the West Midlands Paediatric Retrieval Service gaining competencies in transport medicine.
Outline of Programme
This 2 year training programme is intended for experienced trainee paediatricians and anaesthetists who wish to pursue a career in Paediatric Intensive Care Medicine. The Unit is approved to train specialists in Paediatric Intensive Care Medicine and is able to provide complete training in all competencies required by ICTPICM

Departmental Information
- Demographics
  BCH is the principal (Lead Centre) multi-disciplinary PICU for the population of the West Midlands. The Unit provides a spacious and comfortable working environment with a capacity of 20 beds. The PICU has a high patient throughput with 1200 admissions per annum and provides facilities for an extensive paediatric cardiology and cardiac surgical programme, regional paediatric trauma, burns, neuro and craniofacial surgery, neonatal paediatric surgery, airway and ENT surgery, as well as general and specialist paediatric medical subspecialties. The latter include hepatobiliary medicine and surgery (including liver transplantation), haematology and oncology, neurology, nephrology, respiratory, endocrinology and metabolic disease. There is a comprehensive range of specialist support services such as radiology (including CT and MRI), bronchoscopy and endoscopy. The Unit houses a new regional transport service, (West Midlands Paediatric Retrieval service) transporting over 500 patients per year
- Team
  Trainee cover to the PICU currently compromises 6 National Grid trainees (3 Year 1, 3 Year 2), 2 West Midlands Paediatric SpRs, 2 West Midlands Anaesthetic SpRs, one Adult ICM trainee and 2 Clinical Fellows
- Supervisor(s)
  - The Clinical Lead is Dr Reinout Mildner and the Educational Supervisor is Dr Kevin Morris. Each trainee is allocated a consultant mentor

Clinical Training Responsibilities
Trainees are encouraged to complete a period of training in anaesthesia (6-12 months) prior to entering the PICM training programme. However trainees with no experience or training in anaesthesia will be seconded to the Department of Anaesthesia at BCH to be taught the principles of airway management, endotracheal intubation and the use of a limited range of anaesthetic agents and techniques. In addition a link has been established with a regional anaesthetic department to allow paediatric trainees with no previous anaesthetic experience to spend 6-12 month in order to achieve the necessary anaesthetic and airway competencies. Level 3 trainees in PICM will complete 1 year and, subject to approval of the Educational supervisor, will progress to a second year position to complete their PICM training. Trainees will be assessed as set out by ICTPICM and the relevant Royal College and will meet with their Educational Supervisor on a regular basis. Active participation in emergency retrievals will be arranged, with a full time secondment to the West Midlands retrieval service for 2 months of Year 1 and Year 2. Year 2 PICM trainees will be given a more senior role with supervisory responsibilities, administrative and managerial experience. Participation in research is encouraged

Workload / Rota Arrangements / Example Timetable
Clinical commitments for the intensive care trainees are exclusively on the PICU, and working hours are within current guidelines. There are obligatory periods of night duty, with appropriate compensatory rest. PICU trainees are responsible for co-ordinating all aspects of patient care in the PICU. 24 hour comprehensive supervision and support is provided at any time by two of 13 WTE Consultant Intensivists

Non Clinical Training Responsibilities (expectations of research / audit / teaching)
Teaching.
The PICU runs a programme of teaching comprising a daily teaching ward round, twice a month teaching days to cover the curriculum in PICM, made up of seminars, journal club, transport teaching, radiology rounds, monthly Morbidity and Mortality review and monthly Research Rounds. In addition an active teaching programme exists within the hospital, which includes weekly Grand Rounds, Research Grand Rounds and sub-specialty seminars.
Research
You will be expected to participate in PICU research /audit, either in developing an existing research / audit proposal or in developing your own ideas. The department maintains a high level of academic activity. This has included a diversity of audit and research projects in intensive care and allied disciplines. These include: 1) severity of illness scoring- development and calibration of the Paediatric Index of Mortality (PIM) score; 2)
national PICU audit (UK PICOS & PICANET); 3) UK traumatic brain injury study; 4) hypothermia in head injury (HyP-HIT) (RCT); 5) plasmafiltration in acute septicaemia (RCT); 6) transfusion requirements in paediatric intensive care (TRIPICU) (RCT); 7) development of a paediatric early warning score (PEWS); 8) control of hyperglycaemia in PICU (CHiP) (RCT); 9) collaborative ventilator weaning and 10) RCT of sedation practices (SLEEPS)

Further training opportunities
A link has been established with a regional anaesthetic department to allow paediatric trainees with no previous anaesthetic experience to spend 6-12 month in order to achieve the necessary anaesthetic and airway competencies

Any further information
For further information please contact Dr Kevin Morris on 0121 333 9673 or kevin.morris@bch.nhs.uk

Contact details for unit
Contact Tracey Harewood, PA to PICU Consultants, on 0121 333 9656

Curriculum
Each subspecialty grid programme covers the RCPCH curriculum as specified on the RCPCH website: http://www.rcpch.ac.uk/Training/Competency-Frameworks
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<th>Hospital / Centre</th>
<th>Placement Name</th>
<th>Duration (Months)</th>
<th>Educational Supervisor</th>
<th>Compulsory (C)</th>
<th>Optional (O)</th>
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<tr>
<td>Royal Hospital for Sick Children, Yorkhill, Glasgow</td>
<td>Paediatric Intensive Care</td>
<td>24</td>
<td>Dr Jennifer Scarth <a href="mailto:Jennifer.scarth@ggc.scot.nhs.uk">Jennifer.scarth@ggc.scot.nhs.uk</a></td>
<td>C</td>
<td></td>
<td>Y</td>
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</table>
RCPCH Grid post

Paediatric Intensive Care Medicine
Royal Hospital for Sick Children
Yorkhill, Glasgow

Description
The Critical Care department at Yorkhill manages 16 intensive care and 6 high dependency beds. The specialist and general intensive care provided reflects the comprehensive tertiary medical and surgical specialties and the major emergency and acute receiving services provided by the hospital.

The unit supports a number of National Services including the Scottish paediatric cardiac surgery, invasive cardiology, complex airway surgery, renal transplantation and ECMO services which are based at Yorkhill. A transport and retrieval service supports critically ill children presenting to other hospitals.

The transport and retrieval service is distinctive as it covers both the densely populated central belt as well as the remote and sparsely populated areas of Scotland. Air transport by helicopter or fixed wing aircraft is used to access these areas.

The Paediatric Intensive Care and High Dependency Units moved to a new build facility in August 2005. This has been equipped to a very high level with paperless clinical information and prescribing system, PACS radiology system and state of the art monitoring.

The High Dependency Unit is managed as an integrated part of the critical care service. A variety of patients are admitted to this area including acute medical, post operative care and intensive care ‘step down’ patients.

There are 12 junior medical staff employed in the unit. Staff members are allocated to ‘senior’ and ‘junior’ groups based on previous intensive care experience. All staff work full shifts with total contracted hours being EWTD compliant. The experienced group staff the retrieval service and are expected to take a supervisory role within the unit.

The unit has nine full time intensive care consultants with a mix of paediatric and anaesthetic backgrounds. The PICU maintains close ties with the anaesthetic department and it may be possible for trainees to undertake an attachment to the paediatric anaesthetic department at Yorkhill to achieve their complementary competencies in anaesthesia in addition to their 2 years Grid training. A number of trainees have completed this additional training.

A number of formal teaching sessions and other learning opportunities are held every week. These include a weekly ‘grand round’; radiology meeting; protected teaching session; departmental CME session; journal club and a cardiac liaison meeting. Other meetings and teaching sessions are held regularly in other departments throughout the hospital. A budget is available to support attendance at appropriate courses and conferences.

Junior medical staff have access to high quality computer, office and changing facilities within the intensive care unit.

Senior/ experienced intensive care registrars are expected to undertake research. There are full opportunities for clinical research and access to laboratory facilities can be arranged as required.

Lead trainer: Dr Jennifer Scarth
Jennifer.scarth@ggc.scot.nhs.uk
Yorkshire and the Humber Deanery (West) and Mersey Deanery

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<th>Hospital / Centre</th>
<th>Placement Name</th>
<th>Duration (Months)</th>
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<th>Compulsory (C) or Optional (O)</th>
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<td>1 Leeds General Infirmary</td>
<td>PICU</td>
<td>12</td>
<td>Murray Wheeler <a href="mailto:Murray.wheeler@leedsth.nhs.uk">Murray.wheeler@leedsth.nhs.uk</a></td>
<td>C</td>
<td>Y</td>
</tr>
<tr>
<td>2 Alderhey Children’s Hospital</td>
<td>PICU</td>
<td>12</td>
<td>Paul Baines <a href="mailto:Paul.Baines@rlc.nhs.uk">Paul.Baines@rlc.nhs.uk</a></td>
<td>C</td>
<td></td>
</tr>
</tbody>
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Additional Information

PICM Grid training last 2 years
- Year 1 PICM Training at Leeds General Infirmary
- Year 2 PICM Training at Alderhey Children’s Hospital
Leeds Teaching Hospitals NHS Trust

Training Post in Paediatric Intensive Care - Leeds General Infirmary

Details of the post
The PICU in Leeds admits approximately 850 children per year with over 80% requiring respiratory support. From April 2010 all paediatric inpatient care and PICU will be provided at the Leeds General Infirmary site. The PICU provides care for children requiring the full range of medical and surgical specialities including surgery for congenital heart disease (~40% of admission), neurosurgery, complex neonatal surgery and liver surgery/transplantation.

Facilities
The PICU was opened in 1997, it consists of a cardiac PICU with 7 bed spaces and a general PICU with 10 bed spaces, currently 16 beds are funded. The units are located adjacent to the adult ICU complex and theatre suite and close to the neonatal intensive care unit.
Excellent facilities exist to provide high quality paediatric intensive care including Draeger Evita 4 and Sensormedics HFO ventilators, Aquarius haemodialysis/filtration systems, CFAM and nitric oxide.
The unit works closely with radiology, cardiology/echocardiography and pathology departments in the care of patients.
The postholder will spend 3 months attached to the newly developed Yorkshire Paediatric Retrieval Service, running from 2010, that will perform interhospital transfers of critically ill children within the Yorkshire/Humber and North Trent region.
End of life care is an important aspect of PICU and the unit has close links with the regional children’s hospice, Martin House, including the Palliative Care Consultant attending a weekly PICU ward round.

Education
Education is considered a high priority within the PICU and this is reflected by protected teaching/study days within the shift system. There is a formal education program organised on a Thursday which incorporates monthly Clinical Governance and Morbidity and Mortality meetings. The post holder is expected to be actively involved in audit and research within the PICU. Office and computer facilities are provided and the hospital provides excellent postgraduate library facilities with on-line journal access.

Duties of the Post
The postholder will participate in a compliant 13-person single tier full shift system (Band 1a). This provides 3-4 people through the day with 2 resident night doctors.
The principle duties are patient review, monitoring and implementation of management plans, under direct consultant supervision. The postholder is responsible for the admission and discharge of patients, including the assessment of the critically ill on the paediatric wards and in the emergency department. Liaison with other specialty teams within Leeds and with other hospitals is an important aspect of the post. Technical procedures will be supervised until competence is achieved in line with ICTPICM requirements.
Outline of Programme
The trainee would be one of 4 NTN Paediatric Intensive Care trainees working in the department and be involved in the assessment and management of children with diverse problems on the PICU at Alder Hey. The PICU at Alder Hey is a mixed general and cardiac unit and admits approximately 1,100 patients per year. The post offers comprehensive training in paediatric intensive care, including resuscitation and advanced paediatric life support and the transport of the critically ill child. Practical skills related to the management of critically ill children are taught.

The PICM training programme includes weekly Xray conference, Nutrition ward round (with Gastroenterology Consultant and Dietician), and twice weekly Microbiology ward round (with Microbiology and Infectious Diseases Consultants). The trainee is expected to participate in the weekly programme of lectures and tutorials on all aspects of paediatric intensive care. The department holds monthly journal club, mortality and critical incident meetings which are open to everyone from the multi-disciplinary team. There is a joint monthly Cardiac (including surgery), Anaesthetic, PICU teaching and bi-monthly video-conference with GOSH and BCH PICUs. In addition there is scenario training using high-fidelity mannequins both in-house and at our local high fidelity simulation centre which all trainees are encouraged to participate in. The rota includes experience as ‘chief’ which entails taking an overall management role for the Unit during the day, and senior (year 2) trainees are expected to support and supervise less experienced colleagues. There is allotted time for paediatric anaesthetic experience (in-house) or audit.

There are opportunities to gain Bronchoscopy experience both on the unit and with our colleagues in Respiratory Paediatrics, as well as experience in management of LTV patients. Full range of paediatric laboratory services.

The Mersey Deanery offers a substantial number of courses with regard to obtaining generic and management skills.

Departmental Information
- Demographics
  Alder Hey Children's NHS Foundation Trust is one of the largest and busiest children's hospitals in Europe. The Trust has a world class reputation and is an international centre of excellence, treating more than 200,000 children a year from 20 health authorities in North West, North Wales, Shropshire and Isle of Man.
  The hospital houses supra-regional cleft palate, and craniofacial departments. The PICU supports the full range of general and specialist Intensive Care including Paediatric Cardiac Surgery and post-cardiac surgery ECMO, neurosurgical, burns and major trauma, as well as oncology and post bone marrow transplant patients. Alder Hey also has the busiest paediatric A&E department in the UK.
  Alder Hey Children’s NHS Foundation Trust is designated as a Lead Centre for Paediatric Intensive Care in the North West and has 22 beds with an additional separate 12-bedded High Dependency and Transitional Care (for LTV patients) Units. Approximately 92% of admissions to PICU are intubated and ventilated. It admits approximately 1,100 patients per year. Around 40% of admissions are cardiac, 40% medical and 20% are surgical (paediatric, neurosurgical, neonatal, orthopaedic, craniofacial, trauma, and plastic – including burns).
  Physicians and surgeons share care with the intensive care staff while their patients are in the ICU. The management of the patient is directly co-ordinated by the intensive care consultants.

- Team
- Consultant Staff
- Full-time in Intensive Care: Part-time in Intensive Care:
  - Dr. S. Kerr (Director Critical Care) Dr. F. Potter (Anaesthetics)
  - Dr. K. Thorburn Dr. P. Baines (Research/Ethics)
  - Dr M Horan Dr. A. Selby (Long-term Ventilation)
  - Dr. J. Ratcliffe Dr.K.Parkins (Clinical Lead Regional Transport Team)
  - Dr S Mahoney (locum)
Clinical Training Responsibilities

Alder Hey is recognised by the Intercollegiate Committee for Training in Paediatric Intensive Care Medicine (ICTPICM) as providing full training in this sub-specialty. There will be the opportunity to spend 25% of 2 year NTN training post with the new regional Paediatric Intensive Care Transport team (once established). The ICTPICM syllabus is followed, with competency based assessments incorporated.

Workload / Rota Arrangements / Example Timetable

The rota is a resident full shift system that is fully compliant with the EWTD 48 hours per week guidelines. There are three trainee medical staff on duty at all times, one of whom is an anaesthetist. The post carries Band 1A supplement.

Non Clinical Training Responsibilities (expectations of research / audit / teaching)

The Intensive Care Unit offers facilities for clinical research and there is an active research programme. The department currently is participating in both national (CHIP and SLEEPS, and due to participate in others) and regional trials (fully funded with research nurse and clinical fellow). Trainees would be expected to complete training in 'Good Clinical Practice' and participate in recruitment to trials. The appointee will be encouraged to undertake an audit or research project and recent trainees have successfully submitted abstracts to International meetings. Attendance at local and national postgraduate courses, and meetings on transport medicine and paediatric intensive care, will be actively encouraged. There are excellent postgraduate facilities at the Alder Hey.

Further training opportunities

Respiratory department links to support training in bronchoscopy skills.

The department also has strong links with 3 local Anaesthetic Departments and has successfully supported PICU trainees in their application for Anaesthetic SHO posts to fulfill this part of their training for at least the last 5 years.

Any further information

Contact Dr S Kerr, Dr F Potter or Dr K Parkins for further information - Secretary:Tel. 0151-252 5555
Email: steve.kerr@alderhey.nhs.uk; frank.potter@alderhey.nhs.uk; kate.parkins@alderhey.nhs.uk

Contact details for unit

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Curriculum

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