## Description of ACF Programme:

**Title:** Intensive Care  
**Duration:** 3 years

## Lead NHS Hospital/Trust and contact details:

University Hospital Southampton NHS Foundation Trust  
Tremona Road  
Southampton  
Hants SO16 6YD  
Tel: 02380 777222

## Research Institution in which training will take place:

Southampton University  
University Road  
Southampton  
SO17 1BJ

## Arrangements for protected research time:

The trainee will join the approved Wessex specialist training program in Intensive Care Medicine which will lead to a CCT in Intensive Care Medicine. Depending on their previous training (candidates may apply from ACCS, CMT or Core anaesthesia) the first 2 years (ST 3 + 4) will be spent completing Stage 1 training (a minimum of 12 months in each of anaesthesia, ICM and medicine). They will then enter Stage 2 training. Within stage 2 there will be 1 year of research time which will be spent in Southampton and 1 year of specialist intensive care training (paeds, neuro and cardiac) which will also take place within Southampton. They will then enter Stage 3 training which is a final year of ICM training which will be located in Portsmouth or Southampton.

## Research Objectives:

1) To complete the generic research methods training programme run by the Faculty of Medicine Postgraduate School.  
2) To gain relevant training and experience in research design, methods and systematic review.  
3) To draw up a proposal for an externally funded research training fellowship to be undertaken within Anaesthesia/Intensive Care Medicine which may be located in the research divisions of:  
   a. Clinical and Experimental Sciences ([http://www.southampton.ac.uk/medicine/academic_units/academic_units/clinical_experimental_sciences.page](http://www.southampton.ac.uk/medicine/academic_units/academic_units/clinical_experimental_sciences.page))  
   b. Human Development and Health ([http://www.southampton.ac.uk/medicine/academic_units/academic_units/human_de](http://www.southampton.ac.uk/medicine/academic_units/academic_units/human_de))
To submit the application for a research training fellowship in national competition to MRC, Wellcome Trust, Department of Health or a research charity such as National Institute of Academic Anaesthesia, Intensive Care Society, British Lung Foundation.

Description of research component of programme (up to 500 words):

The University Integrative Physiology and Critical Illness Group (Anaesthesia, Perioperative and Intensive Care Medicine) has particular strengths in resuscitation, lung injury, hypoxia, perioperative medicine, fluid therapy, applied human physiology of exercise, rehabilitation and health services research, and welcomes applications from individuals with complementary research interests. We work closely with the Critical Care Research Area of the Southampton NIHR Respiratory Biomedical Research Unit. There is a strong translational research base in:

- Resuscitation – Professor Charles Deakin
- Lung Injury – Professor Howard Clarke, Dr Alihanandran Dushianthan and Professor Anthony Postle
- Hypoxia – Professor Mike Grocott and Martin Feelisch
- Nitrogen Oxide Biology – Professor Martin Feelisch
- Thrombosis and haemostasis – Dr Ravi Gill
- Perioperative Medicine – Professor Mike Grocott
- Fluid Therapy – Professor Mike Grocott, Dr Mark Edwards
- Applied Human Physiology of Exercise – Dr Sandy Jack, Dr Denny Levett, Professor Mike Grocott
- Rehabilitation – Dr Rebecca Cusack, Dr Sandy Jack
- Health Services Research – Professor Mike Grocott

We have a strong track record of clinical and health studies exploring physiology and pathophysiology in humans. We collaborate with basic science researchers using bench top models to explore related phenomena. We also have a strong track record of Health Services Research in related areas.

Description of clinical component of programme (up to 500 words):

Health Education England – Wessex covers a geographical area from Basingstoke in North Hampshire to Dorchester in West Dorset and the Isle of Wight to the South. This is a spread of approximately 65 miles North to South and 76 miles East to West. Health Education England – Wessex serves a population of around 2.8 million people.

Trust Generic/Specialty Information

- Southampton is the largest of the hospitals. There are several theatre suites in the main hospital and 4 ICUs: general, cardiac, paediatric & neuro.
- The two large DGHs are Portsmouth and Poole & Bournemouth. Poole and Bournemouth are split-site with theatre suites and ICUs on more than one site.
- There are 4 small DGHs, Dorset County in Dorchester and Salisbury District on the
west rotations and the Royal Hampshire in Winchester and the North Hampshire hospital in Basingstoke on the east. Training in anaesthesia and medicine may take place at any of the locations within Health Education England – Wessex. ICU training will take place in Southampton, Portsmouth or Poole / Bournemouth. ST 5 and 6 (research years) will be spent in Southampton. All posts are recognised for training by the GMC.

### Specific support provided to trainee

Throughout their training, the academic fellow will undertake generic research training as well as specialist research training in the chosen area. Specific research training will be provided by:

- Resuscitation – Professor Charles Deakin
- Lung Injury – Professor Howard Clarke, Dr Alihanandran Dushianthan and Professor Anthony Postle, Professor Mike Grocott and Dr Rebecca Cusack.
- Hypoxia – Professor Mike Grocott and Martin Feelisch
- Nitrogen Oxide Biology – Professor Martin Feelisch
- Thrombosis and haemostasis – Dr Ravi Gill
- Perioperative Medicine – Professor Mike Grocott
- Fluid Therapy – Professor Mike Grocott, Dr Mark Edwards
- Applied Human Physiology of Exercise – Dr Sandy Jack, Dr Denny Levett, Professor Mike Grocott
- Rehabilitation – Dr Rebecca Cuscack, Dr Sandy Jack
- Health Services Research – Professor Mike Grocott

Trainees will be allocated a specific research supervisor once they have identified their chosen area and will meet with them regularly throughout the program.

The exact orientation of the specialist training will depend on the chosen specialty of the trainee. Full in- and out-patient facilities in the specialist area are available within Southampton University Hospitals Trust Critical Care Care Group and the Integrative Physiology and Critical Illness Group of the University of Southampton.

### Milestones and timing of achievement of academic and clinical competencies

#### Year 1 / 2

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<tr>
<th>Milestone</th>
<th>Description</th>
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<tbody>
<tr>
<td>Initial training in Anaesthesia, Medicine and Intensive Care Medicine as appropriate</td>
<td>Attendance at an introductory course provided by the Faculty of Medicine's Postgraduate School</td>
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<tr>
<td>Identification of area of interest for research</td>
<td>Initial systematic review of literature in chosen area</td>
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<tr>
<td>Identification of research questions to be addressed in a pilot study</td>
<td>Obtain local research ethics committee and NHS R&amp;D approval for pilot study</td>
</tr>
<tr>
<td>Obtain local research ethics committee and NHS R&amp;D approval for pilot study</td>
<td>Attendance at relevant internal and external training courses and generation of initial data for pilot study leading up to the drawing up of a definitive research proposal for a full time PhD</td>
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**Complete 4 expanded case summaries and WBA as detailed in the ICM CCT curriculum**

**Year 3 / 4**
- Complete 1 year of specialist Intensive Care training
- Complete initial data collection and write up of study
- Submission of clinical research fellowship application to external funding agency and commence work toward higher degree (step out of training at this point until degree completed)
- Pass the FFICM Final
- Further 4 expanded case summaries and WBA as detailed in the ICM curriculum

**Year 5**
- Complete final year of ICM training
- 2 further case summaries and WBA as required.

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<th>How post links in to the NIHR approved Research Training Programme at your locality:</th>
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<tr>
<td>It is expected that the successful fellowship application will lead to 3 years in full time clinical research leading to a PhD. This would provide a natural progression to a lectureship within the Faculty of Medicine. However, if the clinical fellowship funding was not forthcoming the trainee could return to the training programme within the Wessex rotation to complete specialist training.</td>
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<th>Trainee centredness:</th>
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<td>The training will be centred on the trainee’s own needs, identified early during the first year, and there will be dedicated supervision during the post. The fellowship will be tailored towards achievement of successful external funding.</td>
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<th>Quality assurance of the programme:</th>
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<td>These posts are offered as part of the national expansion and formalisation of a training programme for academic clinical medicine. The postholder will be awarded an NTN(A). Academic clinical fellows who do not achieve funding to pursue a higher degree will be able to re-enter clinical training in the region at the appropriate stage.</td>
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| Quality assurance is overseen through the Postgraduate Faculty and involves a rigorous programme scrutinised by the University of Southampton. Much of this is provided via accredited masters modules all of which have undergone quality assurance through the QAA process. The academic supervisors have all completed postgraduate research supervision training provided by the University and Faculty of Medicine. The Wessex Specialist Training Programme in Intensive Care is a new national development but Wessex have run a very successful Joint ICM program for many years with excellent results. |

| The organisation has been successful in generating funding to support clinical research fellowships which has led to 2 anaesthetic/intensive care medicine trainees studying for |
PhDs.

Mentoring Arrangements:

Mentorship is provided through the Faculty of Medicine which has set up a programme currently directed by a Reader in Infection Inflammation and Repair. Many members of the division have already had experience and training in mentorship and all the clinical academics in Child Health have experience and training in research supervision.

Academic Lead (University) for the IAT Programme:

Professor Eugene Healy
Professor of Dermatology
University of Southampton
Southampton General Hospital
Southampton SO16 6YD
Tel 023 8077 7222
E.Healy@soton.ac.uk

Academic Supervisor (University) Details:

Professor Mike Grocott
Professor of Anaesthesia and Critical Care Medicine,
University of Southampton
CE97, Level E, Centre Block
Southampton General Hospital
Southampton SO16 6YD
PA: 023 8079 8449
FAX 023 8087 8847
Email: mike.grocott@soton.ac.uk

Education Supervisor (Trust) Details:

This will be confirmed once the appointee is in post as it will vary in each Trust

Clinical Supervisor(s) Details:

This will be confirmed once the appointee is in post as it will vary in each Trust

Health Education England – Wessex Programme Training Director Details:

Dr Benjamin Skinner
University Hospital Southampton NHS Foundation Trust
Tremona Road
Southampton SO16 6YD
Email: ben.skinner@uhs.nhs.uk

Health Education England – Wessex Programme Manager Details:

Mrs Anna Parsons
Programme Manager for Anaesthetics and Intensive Care
Health Education England – Wessex
Sparrowgrove
Otterbourne
SO21 2RU
Tel: 01962 7184321
Fax: 01962 718401
Email: anna.parsons@hee.nhs.uk

Confirmation that ACF posts attract an NTN(a):

This post will attract an NTN (A)