UNIVERSITY OF BIRMINGHAM
AND
THE WEST MIDLANDS DEANERY

APPLICATION FOR

ACADEMIC CLINICAL FELLOWSHIP IN
GENERAL SURGERY
**Job title (including specialty)**
Academic Clinical Fellowship in General Surgery

**Duration of the Post**
Fixed term appointment for 3 years (1 post, Entry level CT1, CT2, ST3)

**Lead NHS Hospital/Trust in which training will take place**
University Teaching Hospitals in the West Midlands Deanery

**Research institutions in which training will take place**

*One of:*
- The School of Cancer Sciences, University of Birmingham
- Centre for Obesity Research, School of Clinical and Experimental Medicine, University of Birmingham
- Centre for Rare Diseases and Personalized Medicine, School of Clinical and Experimental Medicine, University of Birmingham

*And:*
- The Wellcome Trust Clinical Research Facility

**What arrangement of day release or block release will be used for protected research time**

There will be two blocks of dedicated research activity, six months at the beginning of Year 2, and three months at the beginning of Year 3. The research time will ensure that the trainee has the opportunity to consolidate his/her experience and generate preliminary data in time to apply for a competitive Research Training Fellowship to the Medical Research Council/Wellcome Trust or similar at the beginning of Year 3 to lead to a PhD (or equivalent) or if applicable a Postdoctoral Fellowship.

In Year 1 the trainee will undertake 3 x four month clinical training placements. In Years 2 and 3, the trainee will undertake one dedicated research block of 6 months, followed by one 6 month clinical training placement. The 2 x 6 month block periods of dedicated research will be protected from all clinical duties including ‘on call’ commitments, and will be placed at the beginning of Years 2 and 3.

In addition, there will be day blocks for study days for Masters modules, with some of the curriculum delivered employing distance-learning techniques.

**Description of research component of programme**

The principal objective of this post is to offer a career pathway for prospective clinical academics aiming to become independent researchers/educators. The Fellowship will provide aspiring clinical scientists the opportunity to receive clinical and research training in an established academic environment prior to applying for and obtaining a competitive research fellowship. The University Teaching Hospitals in the West Midlands Deanery are actively involved in research, with a particular emphasis on translational research and clinical trials.

**ENVIRONMENT**

The University Teaching Hospitals in the Greater Birmingham area and the University of Birmingham provide a stimulating intellectual environment not only for clinical training but importantly for basic and translational research.

1. The School of Cancer Sciences is an internationally renowned centre for translational
cancer research, encompassing the majority of the academic and clinical cancer research within the University Birmingham. The School includes the prestigious Cancer Research UK Birmingham Cancer Centre, with one of the largest Clinical Trials Units in the UK, The Birmingham Experimental Cancer Medicine Centre, The Wellcome Trust Clinical Research Facility, The Henry Wellcome Building for Biomolecular Nuclear Magnetic Resonance Spectroscopy, and The Centre for Clinical Haematology. Research Activity is focused in six major areas which span the natural history of cancer from cellular transformation through to development of evidence-based therapy including Cancer Cell Biology, Cancer Genetics and Epigenetics, Biomarkers, Proteomics & NMR, Tumour Immunology and Immune/Gene Therapy, Viral Oncology and Clinical Trials.

2. The University of Birmingham Centre for Obesity Research is one of the UK’s leading centres for obesity research, with over 100 researchers involved from a wide variety of disciplines. These include the Schools of Clinical & Experimental Medicine, Health & Population Sciences, Sport & Exercise Sciences, Psychology, Immunity & Infection, Cancer Sciences, Bioengineering, Education and Biosciences. Many of these groups have been rated UK top 5 in the 2008 Research Assessment Exercise. The Centre also has a dedicated Translational Research Manager, who acts to coordinate collaboration and overarching strategy, development and targeting of individual research proposals, as well as external partnerships and public relations. Furthermore, the Centre has very strong partnerships with local large, well-managed NHS Trusts and primary care networks which have overlapping and in many cases joint strategic objectives.

3. The Centre for Rare Diseases and Personalised Medicine was established in 2010 to undertake groundbreaking research to understand the molecular causes of rare diseases and provide a basis for improving the diagnosis, clinical management and treatment of these disorders. The Centre has established a MRes/PhD training programme in Genomics and Rare Diseases and are provides opportunities for Research Training Fellowships.

4. The Wellcome Trust Clinical Research Facility at the Queen Elizabeth Hospital, Birmingham provides an environment for high quality patient orientated research and early phase/translational clinical trials. There is strong academic presence with established laboratory and clinical research programmes in the gastrointestinal subspecialties (Professor D Alderson and Ms. O. Tucker, Oesophagogastric surgery, Professor D Morton and Mr. S. Bach, Colorectal surgery), and in hepatopancreaticobiliary surgery and liver transplantation (Mr. S. Bramhall, Professor D. Adams). Academic vascular surgery is led by Professor A Bradbury and is based at Birmingham Heartlands Hospital. In addition the Midlands Abdominal and Retroperitoneal sarcoma unit led by Mr. D. Gourevitch is based at the Queen Elizabeth Hospital providing both clinical and research opportunities. These groups are underpinned by extensive grant funding from the MRC, Wellcome Trust, CRUK, and National Institute of Health Research. The laboratory-based research is intimately linked to the general surgery programme at the Queen Elizabeth Hospital with shared research meetings with NHS colleagues with a focus on clinical aspects of chronic inflammatory conditions and gastrointestinal cancer. Close collaborations with scientists in the CRUK Institute of Cancer Studies provide opportunities for developing research projects in gastrointestinal cancer, epithelial cell biology, cancer therapy and biomarkers. The Academic Department of Surgery has an established record of supervising and supporting clinical surgical fellows to complete MD/PhD thesis in the Unit and there are currently 3 surgical fellows in post (MRC, BUPA funded fellowships).

MENTORING AND SUPERVISION

The ACFs will be allocated a clinical and non-clinical supervisor who will be responsible for making sure they have a high quality research project and appropriate training targets in place. In addition access will be in place to all the training and facilities required, and help and support in putting together fellowship applications. In addition a research supervisor will be allocated to the fellow. This will usually be a scientist involved in the ACF’s research project who will supervise the day to day activities of the fellow, and ensure appropriate training and facilities to enable the fellow to complete the research project. The ACF will also
be allocated a clinical supervisor. The use of an academic and clinical supervisor in addition to a research supervisor will ensure the ACF has the appropriate direction and support throughout the training process. In addition, the ACF will be assigned a mentor. This person will be a clinical academic who will not be directly involved in the ACF’s clinical training or research who will be available to meet the fellow regularly and give independent, confidential advice and support. Supervisors will be expected to meet with the ACF at least monthly. The mentors will meet termly but should always be available for informal advice if requested. The programme will be designed to be as flexible as possible and within the constraints of a formalised training programme will try wherever possible to take into account the needs and desires of the individual trainee.

**RESEARCH PROGRAMME OUTLINE**

Following appointment, the ACF will have a meeting with his/her clinical and non-clinical supervisors to discuss a number of suitable research projects and arrange introductory meetings with Principal Investigators in the appropriate Research Groups. The ACF will be allocated a research project in so far as possible in their area of subspecialty interest, and will be designed to facilitate the successful completion of a meaningful and robust project that will generate preliminary results by the end of Year 2 to apply for funding to lead to a PhD (or equivalent).

During Year 1, the fellow will study to obtain a Master of Research (MRes) Degree, with a taught module delivered mainly by distance learning techniques. The taught module will focus on research methodology, statistics, writing and presentations skills and skills including critical analysis and planning. This will act as a basis for the formal dedicated periods of research in years 2 and 3. Study leave will be granted for the MRes degree. The ACF will be strongly encouraged to become involved in clinical audits and research projects to familiarise himself/herself with research methodology and become research active from an early stage in his/her appointment. Following a series of meetings and discussions the research project will be identified by the end of Year 1. Preliminary work in preparation for the dedicated period of research will be strongly encouraged during Year 1 (eg. Literature search) in preparation for the planned research project.

At the beginning of the first period of dedicated research in Year 2 the ACF will be provided with specialist training from their research supervisors in the experimental skills required to complete their identified project, and expert opinion and assistance in ongoing project development. The fellow’s progress will be monitored by weekly supervision meetings and more frequent informal exchanges. This support will continue throughout the clinical period in Year 2 into the second period of dedicated research in Year 3. Frequent meetings will continue throughout the clinical blocks in Year 2 and 3 to support the ACF to progress their research projects. Intensive support will be given to assist in the analysis of data, and to work with the fellow to apply for substantive funding for a PhD (or equivalent). A fellowship application will be prepared in Year 3 at the MRC, CRUK, or Wellcome Trust level. Continuing development of the research project, further experimental work, analysis of data, presentation and publication of the research findings would be expected in Year 3.

In addition, during their dedicated research periods the ACFs will also have the opportunity to experience academic general surgery by attending research clinics, research meetings and becoming actively involved in clinical research projects. The Academic Department of Surgery at the Queen Elizabeth Hospital has a particular interest in translational research and is actively involved in a number of national, regional and international studies. The ACF will attend visiting seminar programmes, and weekly internal and external lecture series in the CRUK Institute of Cancer Research.

**Description of clinical component of programme**

The West Midlands region constitutes the second largest training scheme in the United Kingdom and has a well established record of training excellence. The ACF position is a full-
time post intended to provide clearly defined periods during which the ACF will obtain both a clinical and an academic training. The ACF will spend 75% their time in clinical training with 25% dedicated to an academic training programme for a period of three years in the expectation that they will proceed to a higher academic degree (PhD or equivalent). The ACF programme in General Surgery will provide a supervised programme to allow candidates to complete their clinical accreditation and achieve their core competencies in Core Surgical Training (CST) in General Surgery in addition to undertaking research training in General Surgery.

Training in General Surgery will be provided through the West Midlands Deanery. Clinical training will take place in the University Hospitals in the Greater Birmingham area. The academic training path will be focussed on the Queen Elizabeth Hospital. An environment of excellence for General surgery exists at these centres allowing academic trainees to complete CST training in General Surgery. Confinement of clinical training to the Greater Birmingham area hospitals will ensure proximity of the ACF to the Academic Department of Surgery, the University of Birmingham, his/her clinical and academic supervisors, and access to the appropriate facilities to enable satisfactory completion of their research component. Research active clinicians in General Surgery include both full-time NHS and University funded (Professor Alderson, Professor Morton, S. Bach, O. Tucker) consultants. Many of the full time NHS General Surgical consultants hold honorary senior lectureships with the University of Birmingham. In addition to acquisition of core surgical skills and competencies, the ACF will be expected to attend the weekly medical and surgical grand rounds, and invited external lecture series.

The Academic surgical unit at the Queen Elizabeth Hospital has an established record of attracting and training national and international surgical fellows, with current surgical fellows in Upper GI, Colorectal and Sarcoma surgery, 2 research fellows including an MRC fellow, and a track record of supervision of higher degrees in Surgery. There are close links with the Department of Gastroenterology and Hepatology as well as research links to the CRUK Institute of Cancer Research.

At entry
- Determination of clinical training needs
- Discussion of research opportunities and needs
- Introduction to available research facilities, encouragement to attend appropriate research as well as clinical meetings
- Appointment of supervisors: academic and clinical
- Appointment of mentor

0 to 12 months
- Clinical training in General Surgery
- Completion of core competencies in Core Surgical Training
- Completion of MRCS Part I (if not already completed)
- Assessment of clinical training so far and future needs
- Completion of 2 generic research training modules that will count towards acquisition of MRes
- Selection of appropriate research supervisor and project

12 to 18 months
- First block of dedicated research period
- Integration into supervisor's research group
- Attendance at internal research/lab meetings
- Attendance at external research meetings in CRUK Institute of Cancer Studies
- Generation of data for competitive fellowship application
- Assessment of clinical training and protected research time
**18 to 24 months**
- Clinical training in General Surgery
- Completion of core competencies in Core Surgical Training
- Completion of MRCS Part II (if not already completed)
- Assessment of clinical training and protected research time

**24 to 30 months**
- Second block of dedicated research period
- Attendance at internal research/lab meetings
- Attendance at external research meetings in CRUK Institute of Cancer Studies
- Generation of data
- Analysis of data
- Fellowship applications
- Regular meetings with supervisor to ensure progress is satisfactory

**30-36 months**
- Clinical training in General Surgery
- Completion of core competencies in Core Surgical Training
- Achieve funding for full-time research training fellowship
- Or successful application for clinical training as a lecturer with continuing research activity
- Or reentry into clinical training with MRes qualification

The order of the clinical blocks in year 1 will vary dependent on the requirements of the general surgery rotation. The ACF will participate in day-to-day clinical work and the general surgical ST on-call rota, except when he/she is in the dedicated research blocks.

**PROGRAMME MANAGEMENT AND ADMINISTRATION**

The programme will be jointly managed by the Medical School at the University of Birmingham, The Queen Elizabeth Hospital (UBHFT) and the West Midlands Deanery through the CST Committee. Appointees will be assessed in the usual way by the CST Committee and by the University personal development programme. The progress of the ACFs will be carefully monitored. Each Clinical Fellow will have a competency portfolio and attend regular meetings with clinical and educational supervisors to ensure all milestones are passed and appropriate experience acquired and training given. Joint academic and clinical appraisals will be performed according to Follett principles with assessment according to the College and Deanery recommendations for ACFs.

The ACF will be a run through post for the duration of the ACF and beyond. Clinical progression will be based on the achievement of their core competencies as assessed by the Deanery and the College. If the ACF fails to achieve the pass parts I and II of the membership of the Royal College of Surgeons, and pass the general competencies for CST CT1 and CT2 training in General Surgery, they will undergo an intensive period of clinical training under close clinical supervision in the last 6 month clinical rotation in Year 3. If the ACF wishes to leave the academic clinical training programme prior to completion he/she will retain their NTN training number and reenter the West Midlands surgical training programme (CST or HST (ST) programmes) at a timing and placing decided by the relevant training committee after discussion with the trainee. By the end of the 3 years if the trainee fails to obtain a fellowship to do full-time research or decides to withdraw from academic training they will reentry into the West Midlands HST programme at a timing and placing decided by the CST and HST training committees after discussion with the trainee. Continuation in the HST programme will require all parts of membership of the Royal College of Surgeons and core competencies are completed.
### Academic Supervisor (University) details
Ms. Olga Tucker, Senior Lecturer in Upper GI Surgery

### Deanery Programme Training Director details
Mr Edward Harper, Chair of the Core Surgical Training Committee  
Mr Mike Hallissey, Chair of the Higher Surgical Training Committee

### Confirmation that ACF posts attract an NTN (a)
Agreement with Postgraduate Dean (Dr E Hughes), Chair of the Core Surgical Training Committee, West Midlands Deanery (Mr Edward Harper), and Chair of the Higher Surgical Training Committee, West Midlands Deanery (Mr Mike Hallissey)

### The following links may be useful:
* Information on West Midlands Deanery’s Foundation Programmes [http://www.wmdeanery.org/mmc/fps.htm](http://www.wmdeanery.org/mmc/fps.htm)  
* University of Birmingham School of Medicine and the Wellcome Trust Clinical Research Facility [http://www.crf.bham.ac.uk/](http://www.crf.bham.ac.uk/) and [http://www.medicine.bham.ac.uk/](http://www.medicine.bham.ac.uk/)