Job Description

NIHR Academic Clinical Fellowship

Neurosurgery - ST1 Theme: Clinical Therapeutics & Pharmacology & Industry

(1 single speciality post)

Hull York Medical School, in partnership with NHS England North East and Yorkshire and the Hull University Teaching Hospitals NHS Trust, has developed an exciting pathway of academic clinical training opportunities.

Applications are now invited for an Academic Clinical Fellowship in Neurosurgery at **ST1** level. This post is funded and approved by the National Institute for Health Research in the Clinical Therapeutics & Pharmacology & Industry theme, and offers candidates a comprehensive experience of clinical academic medicine working alongside internationally renowned clinicians and researchers.

We are seeking a highly motivated, enthusiastic individual with the potential to excel in both their clinical and academic training and who has the ambition to be the next generation of academic clinicians.

This Academic Clinical Fellowship (ACF) programme in Neurosurgery is run by Hull York Medical School (HYMS) in conjunction with the Hull University Teaching Hospitals NHS Trust and NHS England North East and Yorkshire and the Humber.

Academic Clinical Fellowships (ACFs) are 3 year fixed-term national training posts. Trainees undertake 75% clinical and 25% academic training over the term of the post. They are employed by the NHS Trust and have an honorary contract with the University at whose Medical School their academic research is supported.

ACF trainees also undertake a Research Training Programme provided by the University. They are eligible for a £1,000 bursary per year to support research training activity (e.g. to attend academic conferences).

ACF trainees would also normally complete and submit an external funding application for a research fellowship to enable them to complete a higher degree (PhD or research MD) following the completion of their ACF fixed-term post, which would be completed as Out-of-Programme-Research (OOPR).

All Academic Clinical Fellowships are run-through posts. A trainee entering ACF at ST1 in a specialty with a Core Training period would therefore be guaranteed continued training to CCT in the eventual specialty, as long as they progress satisfactorily through both their

academic and clinical training. Run-through status is withdrawn if ACFs do not complete the academic component.

POST DETAILS

Job Title

NIHR Academic Clinical Fellow (ACF) – Neurosurgery

Duration of the Post

Up to 3 years (25% academic, 75% clinical).

A mutually agreeable timetable will be drawn up by the candidate and the academic/clinical supervisors, designed to meet overall training goals. This will include protected research time. The exact division of time will be guided by the proposed research project and whether blocks of time or weekly research time are more appropriate. The appointee will have on-call commitments which will vary depending upon the varying shift systems and training/service requirements.

Lead NHS Hospital/Trust in which training will take place

Hull University Teaching Hospitals NHS Trust (see details of rotation below).

Research institution in which training will take place

The successful candidate will be based at the Centre of Biomedicine (in the Allam laboratories on the Cottingham Road campus), and with our NHS partner – Hull University Teaching Hospitals NHS Trust (Hull Royal Infirmary, Hull). The Fellow will be supervised by Professor John Greenman (Professor of Tumour Immunology) and Mr Shailendra Achawal (Consultant Neurosurgeon, Hull University Teaching Hospitals NHS Trust).

Research Protected Time:

ACFs have protected time to attend and complete either an MSc by research or take relevant modules to extend their training (if they already have an MSc), at Hull York Medical School, if deemed apropriate. The protected research period (25% time) is used to obtain specific experience and knowledge in the research area of interest, obtain pilot data, and apply for an external research fellowship.

Academic Clinical Fellowship Training Programme: Research Component

This proposed Neurosurgery ACF will gain experience of multiple cutting-edge technologies as part of the Platform Science theme, these include:

1. designing and optimising microfluidic devices for maintaining tumour biopsies in a viable state;

2. high throughput imaging/microscopy to assess effects on tumour tissue following treatment regimens

3. multicolour flow cytometric analysis of cell surface phenotype and cell viability.

Over the past 2 decades the multidisciplinary group in Hull have pioneered using bespoke microfluidic devices, designed and fabricated in various materials (including 3D-printing in biocompatible resin), that can maintain small biopsies of tumour solid tumours in a viable state for up to 15 days in the case of glioblastoma (GBM). From a single biopsy up to 15 devices can be established and used to assess the efficacy of different chemotherapy and radiotherapy protocols, opening the potential of personalising treatment based on *ex vivo* response (Olubajo et al; Transl Oncol. 2020;13(1):1-10. doi: 10.1016/j.tranon.2019.09.002; Barry et al. Lab Chip. 2023, 30;23(11):2664-2682. doi: 10.1039/d3lc00204g). Ongoing work in the unit is investigating the interactions between peripheral blood mononuclear cells and brain tumours using a 3D printed peristaltic pump for recirculating patient mononuclear cells over tumour tissue, with and without a pseudo-blood brain barrier. In addition, other work is examining the role of CBX2 as a potential therapeutic target using siRNA to modify this gene's downstream effects principally in a spheroid model of GBM, but has also recently been shown to have similar effects tumour biopsies. In collaboration with biomedical engineers there is a stream of work to integrate miniaturised detection units into the devices so that the effluent can be continuously monitored; detection units can be based on colour, electrochemistry or luminescence. The effluent from the devices is being used in multiple ways to monitor "treatment" effects as any changes in cytokine profiles or extracellular vesicles must come from the biopsy, without interference from other body tissues or the general blood circulation. Comparing data from the effluent, and comparing it with the tissue biopsy, which can be recovered after treatment, provides a powerful platform to monitor patient-specific changes following a clinically-relevant intervention.

All of the projects are available to the successful applicant and the specific project will be based around a person's interests, skills and career plans.

Please contact Prof John Greenman for further details of the research plans (j.greenman@hull.ac.uk)

On appointment, in conjunction with their supervisors, the ACF will complete a Training Needs Analysis (TNA) and be able to access modules from the HYMS Post Graduate Training Selection list both to help with their research project and with their professional development as a researcher.

We anticipate the successful exit point for ACF trainees will be the award of an externally funded clinical research training fellowship to pursue a PhD or MD; prior to re-joining the academic career path as a Clinical Lecturer.

Academic Clinical Fellowship Training Programme: Clinical Component

ST1 entrants will undertake their core surgical training in Hull University Teaching Hospitals. Rotation with allied specialties will be provided.

They will subsequently join Hull Sheffield Neurosurgery training programme.

Academic Leads and Supervisors:

Prof John Greenman
Professor of Tumour Immunology (Hull York Medical Schol)
j.greenman@hull.ac.uk

Mr Shailendra Achawal
Consultant Neurosurgeon (Hull University Teaching Hospital Trust)
s.achawal@nhs.net

Training Programme Directors

Mr Nick Phillips
Consultant Neurosurgeon (Leeds Teaching Hospitals)
nickphillips@nhs.net

Academic Training Programme Director

Professor Bob Phillips
bob.phillips@york.ac.uk

Further Information

Because of the nature of the work for which you are applying, this post is exempted from the provisions of Section 4 (2) of the Rehabilitation of Offenders Act 1974 by virtue of the Rehabilitation of Offenders Act 1974 (Exceptions) Order 1975.

Applicants are therefore, not entitled to withhold information about convictions, which for other purposes are "spent" under the provisions of the Act, and in the event of employment any failure to disclose such convictions could result in dismissal or disciplinary action by the University. Any information given will be strictly confidential and will be considered only in relation to an application for positions to which the Order applies.

For further information about the Academic Clinical Fellowship programme, please refer to the NIHR (National Institute for Health Research) Trainee Coordinating Centre (NIHRTCC) page on NIHR Integrated Academic Training For Doctors and Dentists - Academic Clinical Fellowships

Person Specifications

See Person Specifications 2025 | Medical Hub (hee.nhs.uk)

AND the Academic eligibility criteria listed at:

National Institute for Health Research (NIHR) Academic Clinical Fellowship (ACF) 2025 | Medical Hub (hee.nhs.uk)

How to Apply

For more information about applying to ACF vacancies in NHS England North East and Yorkshire please visit:

http://www.yorksandhumberdeanery.nhs.uk/recruitment/our_vacancies/academic_recruitment/

Applications will only be accepted through the Oriel online application system:

https://www.oriel.nhs.uk

Applications open:	Thursday 2nd October at 10am
Applications close:	Thursday 30th October at 4pm

After the application deadline no applications will be accepted. **There will be no exceptions to this deadline.** You are advised to complete and submit your application ahead of the deadline to allow for any unforeseen problems.

Interviews will be held via MS Teams on a date to be confirmed during the first two week of December 2025.

Appendix 1: Further particulars – Hull York Medical School

The Hull York Medical School (HYMS) is a collaboration between the Universities of Hull and York and the NHS. HYMS operates from both University campuses and within teaching hospitals and medical practices throughout the Yorkshire and Humber region. Having recently celebrated its 10th anniversary, HYMS is a relatively young medical school which is developing a growing reputation for its teaching and research.

HYMS has a strong reputation as an undergraduate medical school. Our innovative curriculum includes an enquiry-based approach to learning, early clinical experience, balanced teaching across all health sectors and a wide range of student selected learning opportunities. Our graduates are recognised as being very capable Foundation Doctors, many of whom have stayed locally to help develop health care services in this area.

The quality and impact on health and patient care of research carried out in the Hull York Medical School (HYMS) was recognised by the University of York's ranking as 7th in the country for Public Health, Health Services and Primary Care in the national Research Excellence Framework 2014. HYMS researchers were also part of York's top-10 rated submissions in Biology and Psychology. Across the whole of HYMS, a partnership between the Universities of Hull and York, over 85% of research was assessed as world leading or internationally excellent.

Within the Universities, research development in HYMS has been based on a distributed model, in which academic staff may have a research base in a cognate academic department of the University of Hull and/or York, providing scientific integration, critical mass and technology platforms with which to work. In relation to clinically orientated research there is a Clinical Research Facility (the Daisy Building) in Hull at Castle Hill Hospital and an Experimental Medicine Unit at York Hospital, to facilitate translational research. HYMS also plays a role in establishing and facilitating research networking between NHS partners in the region through topic based regional meetings.

The area covered by the HYMS NHS partnership comprises Hull and the East Riding of Yorkshire, York and North Yorkshire, and Northern Lincolnshire, which together have a population of around 1.8 million. 17 NHS organisations make up the HYMS NHS partnership, within which there are over 600 consultants and 900 general practitioners. Encompassing both rural and urban populations, the region contains a variety of environments in which health services are delivered. There are areas of considerable deprivation, not only in urban centres, but also in patches across the rural hinterlands. Heart disease and lung cancer are severe problems in Hull. Measures of overall health in North Lincolnshire are poorer than the country as a whole. However, in most of the region, rates for infant mortality and most disease-specific death are well below national averages, the prevalence of smoking and drug use are low, and the uptake of screening is high in many areas.

East Yorkshire with its homogenous and stable population of 600,000 is an ideal centre for prospective observational and interventional clinical research: the central urban area of Kingston upon Hull has a population of 350,000. The NHS clinical facilities are well developed and virtually comprehensive across the medical and surgical disciplines; only certain transplantation and cardiac neonatal surgical procedures require distant referral. Hence there exists a wealth of clinical material available for approved educational and research purpose.