# Job Description

# NIHR Academic Clinical Fellowship

# Medical Oncology ST1 or ST3 (1 post) – theme Health Needs of Older People

**For this post, applications will be welcome in any of the areas where we have research strengths in this theme (see below)**

The University of Sheffield, in partnership with Health Education England Yorkshire and the Humber and the Sheffield Teaching Hospitals NHS Trust, has developed an exciting pathway of academic clinical training opportunities.

Applications are now invited for an Academic Clinical Fellowship in Medical Oncology at ST1 or ST3 level. This new post has been created as part of the Health Education England (HEE)/National Institution for Health Research Trainee Coordinating Centre (NIHRTCC) programme of Integrated Academic Training and offers candidates a comprehensive experience of clinical academic medicine working alongside internationally renowned clinicians and researchers.

**Please note:-** Applicants looking for an ST2 post are encouraged to apply to this vacancy at ST1. If successful your experience will be assessed upon commencing in post enabling you to work at the appropriate level.

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

This Academic Clinical Fellowship (ACF) programme in Medical Oncologywill be run by the University of Sheffield, the Sheffield Teaching Hospitals NHS Trust and Health Education England Yorkshire and the Humber.

Academic Clinical Fellowships (ACFs) are 3 year fixed-term national training posts. They attract an NTN(A) and 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 for which funding is provided by NIHR. They also are eligible for a £1,000 bursary per year to support research training activity (e.g to attend academic conferences).

The Clinical Academic Programme at Sheffield has recently introduced a competitive ACF pump-priming award. Trainees can apply for up to £2000 for initial costs for work aimed at achieving a research fellowship.

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, regardless of specialty, with the exception of ‘Medical Education’ ACFs. 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) – Medical Oncology (All research interests considered)

## Duration of the Post

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

## Lead NHS Hospital/Trust in which training will take place

Sheffield Teaching Hospitals NHS Trust.

## Research institution in which training will take place

Academic Unit of Clinical Oncology, Weston Park Hospital (WPH), Department of Oncology and Metabolism, University of Sheffield Medical School, Weston Park Sheffield Cancer Centre.

The Department of Oncology and Metabolism at the University of Sheffield has an extensive research programme from basic science through to clinical trials. WPH is one of only three purpose built oncology hospitals in the UK, with excellent facilities for clinical research. The Fellowship will be hosted by the Academic Unit of Clinical Oncology (main focus clinical trials and early drug development, bone oncology, patient focussed research and including the effects of ageing and comorbidities in cancer patients via collaboration with The Healthy Lifespan Institute (HELSI).

The Department has an international reputation in bone oncology (metastasis to bone and late effects of cancer treatments on the skeleton) and has been highly involved in the development of bone targeted therapy, including the bisphosphonates, denosumab and radium-223. We also have special interests in the scheduling of cancer treatment to optimise quality of life, especially relevant in older patients. In addition Sheffield has a strong reputation in lung and melanoma research and is one of the few specialist centres in the country which treats uveal melanoma. The Department also has strengths in drug development, for example with the PARP inhibitors which were developed in Sheffield and have now become part of standard treatment. On the laboratory side, the Department has a strong reputation in genetic instability and DNA repair, anti-angiogenic therapy, immunotherapy and tumour targeting. In 2018, the University of Sheffield (TUoS) announced the creation of HELSI, The Healthy Lifespan Institute. HELSI is a University wide institute, drawing together collaborators and substantial grant income (£>77M) across multi departments and multiple disciplines, including medicine, engineering and social sciences including psychology to facilitate and support high level research into ageing and longevity. The institute will foster new and exciting collaborations, strengthening our grant funding power and leading to novel and practice changing research.   TUoS has a wealth of expertise in the area of older age/healthy ageing research across multiple departments and the applicant may draw on expertise in psychology, social sciences, primary care, medical oncology, health economics and decision sciences, mixed methods research, statistics and trial design, laboratory based expertise including genomics, proteomics and epigenomics, oncology, primary care and surgery. Within the university we collaborate with multiple other disciplines including Insigneo, Computational Biology, the Dept of Automated Systems, the Charles Clifford Dental School, the Dept of Electrical Engineering and externally with Sheffield Hallam University.

The Weston Park Strategy for the next 5 years has a strong focus in further developing research excellence and also a state-of-the-art Oncology School/Education Centre.

The Department makes a substantial contribution to teaching in the undergraduate medical curriculum. The department also runs an MSc in Translational Oncology, and contributes to the MSc in Genomic Medicine.

**Academic Unit of Clinical Oncology**

Current senior staffing of the Academic Unit of Clinical Oncology comprises:

Janet Brown (Professor of Translational Medical Oncology and Head of the Academic Unit)

Sarah Danson (Professor of Medical Oncology and Lead for the Sheffield Experimental Cancer Medicine Centre, ECMC)

Professor Syed Hussain, Uro-oncology,

Catriona Mayland (Senior Yorkshire Cancer Research Fellow) – palliative care and uro-oncology,

Ingunn Holen (Professor of Bone Oncology)

Andrew Chantry (Senior Clinical Lecturer)

Penelope Ottewell (Non-Clinical Senior Lecturer)

Robin Young (Senior Yorkshire Cancer Research Fellow)

Bilal Tahir (Senior Yorkshire Cancer Research Fellow)

Shelley Lawson (Senior Lecturer in Oncology)

Matthew Hatton (Honorary Chair in Clinical Oncology),

Caroline Wilson (Honorary Senior Lecturer in Medical Oncology)

Jon Wadsley (Honorary Professor in Clinical Oncology and head of the Cancer Clinical Trials Unit).

Matt Winter (Honorary reader in Medical Oncology),

Diana Greenfield (Honorary Chair and Consultant Nurse in Late Effects of Cancer)

Currently we have three ACFs in Medical Oncology to ST1 and one at ST3. In addition we have five clinical fellows undertaking PhD projects.

There are very close links with Sheffield translational scientists including Professor Claire Lewis (immunotherapy) as well as proteomic and genomic links in bone oncology.

In addition, there are postdoctoral fellows, clinical research fellows and a large team supporting clinical trials comprising data managers, clinical trial coordinators, research nurses, research physicists, research radiographers, research pharmacists, graduate students and technicians, all funded through research grants.

The YCR Sheffield funding stream involving the Sheffield Pioneer fund and the Living Lives to Live fund offer a fantastic opportunity for ACFs to apply for funding to carry out both PhD research and subsequent research. Research into frailty and trial adaptation with co-morbidities is fully in scope for this funding call. The four Sheffield cancer research strategy themes are:

1. Cancer prevention and early diagnosis

2. Digital health, big data, advanced diagnostic technologies and rethinking the delivery of cancer care

3. Translational and precision cancer medicine

4. Improving the outcomes for cancer patients – reducing mortality and exploring experience & value

In basic and translational medical science, there are extensive facilities for molecular biology, tissue culture, immunotherapy genetics, microarray, genomics and proteomics and confocal imaging. Bone Oncology, both clinical and laboratory-based is one of the major strengths in which Sheffield is a world leader, with close links to major international research groups in this area. We also have special expertise in genomics.

The Academic Unit has a strong and integrated infrastructure for delivery of research training, with excellent opportunities for pursuing clinical and linked laboratory research, as well as developing qualitative research, for example in the late effects of cancer and cancer treatments, in the elderly cancer population and qualitative research in melanoma. We have strong and active links with the Sheffield School of Health and Related Research (ScHARR) for qualitative and health service research and the Leeds Clinical Trials research Unit (CTRU) for collaboration in clinical trials.

Clinical research is based in the Cancer Clinical Trials Centre, adjacent to Weston Park Hospital, on the main Sheffield University and hospitals campus. It is a purpose built clinical research building, with unsurpassed facilities and over 40 specialist staff supporting a wide portfolio of cancer clinical trials throughout the Trust and North Trent. A new Clinical Research Unit opened in 2013, expanding our capacity for early stage trials and translational research. There are close links with the National Cancer Research Institute (NCRI) and European Organisation for Cancer Treatment and Research (EORTC). Weston Park Hospital functions as the non-surgical Cancer Centre for the 1.8 million population of South Yorkshire. There are more than 35 consultant oncologists and16 SpRs, all of whom participate in the cancer clinical trials programme. Subspecialty interests of the consultants span all tumour types. There are active postgraduate training programmes in both Medical and Clinical Oncology and weekly cancer centre seminars.

Sheffield also has a CRUK / NIHR Experimental Cancer Medicine Centre (ECMC) facilitating early phase trials and biomarker research.

### *Unit performance*

The Academic Unit of Clinical Oncology has a strong internationally competitive record of clinical research and publications in high ranking journals. The Unit has attracted funding from a wide range of organisations including NIHR, Cancer Research UK, MRC, Breast Cancer Now, Prostate Cancer UK, Leukaemia and Lymphoma Research, Yorkshire Cancer Research (YCR), Weston Park Cancer Charity (WPCC) and a range of industrial sources. We also receive programme funding from the Department of Health and Cancer Research UK (CR-UK) for the Experimental Cancer Medicine Centre. We are especially active in translational research, including trials of new drugs or new combinations of drugs in these areas, some of which have been developed within our own laboratories. We are recognized as an international centre of excellence in bone oncology.

The current clinical staff of the Unit are engaged in running a range of Phase I, II and III trials and several large national studies are run from Sheffield. Major interests of the current clinical staff include bone oncology breast cancer and urological tumours (Prof Brown,Professor Hussain, Dr Wilson), lung cancer, melanoma and sarcoma (Prof Danson Dr Young), myeloma (Dr Chantry). Major interests of the Unit’s scientific staff include mechanisms of bone metastasis (Profs Holen and Dr Ottewell), genomics and molecular aspects of myeloma (Dr Lawson). We also have an interest in immunotherapies and markers of both toxicity and drug resistance as well as late effects of cancer therapies.

**Sheffield Teaching Hospitals NHS Foundation Trust**

Sheffield Teaching Hospitals NHS Foundation Trust, which incorporates the Northern General Hospital, the Royal Hallamshire Hospital, the Jessop Wing, Weston Park Hospital and Charles Clifford Dental Hospital, is now the fourth largest NHS Trust in the country. It was granted Foundation Status in 2004. As a Trust, Sheffield Teaching Hospitals NHS Foundation Trust is responsible for the planning and delivery of the highest quality patient care, providing services for patients not only from Sheffield but all parts of the North Trent region and UK. Nearly one million patients come to us for treatment each year. Further details are included in the attached document.

**Post Details**

**JOB TITLE: NIHR Academic Clinical Fellowship in Medical Oncology**

**BRIEF OUTLINE:**

The clinical programme is designed to provide training from either ST1 or ST3 level for a period of 3 years. Further details of the Specialist Registrar rotation for South Yorkshire are provided in the attached document.

**Objectives of the Training Programme:**

1. To undertake training as follows: For candidates in ST1, the post will involve 3 years of core clincial training, which will include a rotation to oncology. For candidates in ST2, the post will involve one year of core clinical training and two years of specialist training in medical oncology. Candidates in ST3 will undertake 3 years specialist training in medical oncology from the outset

2. To undertake a generic programme in research methodology.

3. To identify an area of academic and clinical interest upon which to base an application for an externally-funded PhD programme.

**Relationship between Academic and Clinical Training**

An ST1 postholder would be expected to rotate to a period of oncology training in Years 1, 2 or 3. An ST2 postholder may undertake rotation to oncology in Year 1, but would take up specialist training as part of the South Yorkshire specialist registrar rotation in Medical Oncology, based at Weston Park Hospital, Sheffield in Years 2 and 3. For an ST3 applicant, the postholder will take up the specialist registrar rotation from the outset. Please see the later details of the rotation and Weston Park Hospital.

Academic training will be based in the Academic Unit of Clinical Oncology, situated at Weston Park Hospital and, as appropriate, in associated laboratories all of which are in the main Sheffield University and hospitals campus. The fellow will be assigned clinical and laboratory academic supervisors. During their academic attachment, the trainees will be assisted in preparation of a competitive application for an externally funded training fellowship. In preparation for this, they will be helped to identify a topic of clinical and academic interest for research; undertake a review of the relevant literature, suitable for publication as a review article; undertake training in relevant research techniques; and obtain preliminary research data to strengthen the training fellowship application. As part of research training, fellows would normally be expected to participate in appropriate peer-reviewed publications, for example in invited reviews and/or original papers.

**Research Protected Time:**

Will be based on day release and a block of dedicated laboratory/clinical research time away from routine clinical duties for academic research, typically for 9 months, with no out-of-hours commitments.

**Successful candidates:**

The exit from this post will typically be to an externally-funded research fellowship, leading to award of a PhD and subsequently application either for a Clinical Lecturer post or a Clinician Scientist Fellowship. The Unit has a good record of success in Fellowship applications. The Unit has also been awarded a number of Clinical Lecturer Posts by the NIHR.

**Unsuccessful candidates:**

If the post-holder does not achieve the expected clinical competencies, this will be handled in the same way as for all other trainees in speciality medicine.

If the post-holder fails to achieve academic competencies, or is unsuccessful in obtaining research funding, they would be anticipated to return to a clinical training post. This will be discussed in good time with the Training Programme Director (TPD) through the system for appraisal and mentoring of academic trainees. Whilst no guarantee of an appropriate post is possible, every effort will be made to accommodate such individuals within the local training schemes.

**REPORT TO:**

Professor Janet Brown (Academic Training Lead) and chosen academic supervisors.

Dr Suzanne Darby (Medical Oncology TPD) and clinical/educational supervisors.

**Main Activities & Responsibilities:**

This is a 3 year full time training post carrying a NTN(a) in Medical Oncology (either from Year 1 for an ST3 postholder or from Year 2 for an ST2 postholder)

The successful applicant will have evidence of academic achievement and ideally have research experience. They should be aiming to pursue a career in academic Medical Oncology.

**Research**

The successful candidate will be expected to develop an area of research interest and apply for a research training fellowship, e.g. to NIHR, CRUK, YCR, MRC or Wellcome Trust. This will be done in consultation with Professor Janet Brown, Professor Syed Hussain and colleagues. A wide range of academic training opportunities is available.

This postis advertised under the NIHR theme of Health Needs of Older People. The ACF would undertake a project in collaboration with The Healthy Lifespan Institute- HELSI e.g. to establish and test interventions to explore modifiers of frailty and resilience in older cancer patients (Wyld, Bellantuono, Shared Ageing Research Models, Brown). Collaborative analysis of stratified treatment outcomes using detailed comprehensive geriatric assessment using propensity score matching and comparing between the UK Age Gap dataset (cohort study of over 3450 UK women with breast cancer) and the Dutch FOCUS dataset to determine variance in practice across surgery, chemotherapy, targeted therapies and radiotherapy  which may explain the inferior outcomes in this age group in the UK and will inform interventions for older women with breast cancer (Wyld, Brown). Areas of differential practice will be highlighted and guidelines developed with national UK specialty association to reverse trends in poorer age related outcomes. Professor Brown also has a project with available data looking at assessment of frailty in a large population of metastatic renal patients and survival and other outcome data.

**Teaching**

The post-holder will contribute to the undergraduate and postgraduate teaching programmes of the School and will also be involved with the assessment of students and have personal mentoring responsibilities for a small group of students on the MBChB programme.

**Clinical Duties**

The clinical programme is designed to provide training from ST1/ST2/ST3 level (depending on the training stage at appointment) until completion of CCT. During the clinical component of the rotation the ACF will have identical duties and responsibilities to non-academic trainees and will participate in the assessment and management of medical admissions, outpatient clinics and emergency duties as appropriate. The ACF will be expected to participate in postgraduate education, audit and teaching in accordance with the standard job description of each post in the rotation.

Outpatient duties include specialist clinics at Weston Park Hospital and surrounding District General Hospitals. These clinics consist of a combination of new, follow up and chemotherapy clinics. Ward based duties would include supervision of patients receiving all types of modern cancer treatment, both as in-patients and on the Day Case Unit, including acute oncology managing patients with cancer and cancer treatment related complications

**On-Call/Emergency Duties**

The trainee will join the on-call cover rota appropriate to the level of appointment, except for the period of dedicated laboratory/clinical research time,see above). The appointee will be expected to provide prospective cover for the annual and study leave of colleagues.

Irrespective of his/her place of residence it is the responsibility of the appointee to ensure that when on-call he/she will be available to meet his/her clinical commitments.

**Accommodation and support for the post**

It is planned that office space will be made available within the Academic Unit of Clinical Oncology and laboratory space will be made available as required.

**INFORMAL ENQUIRIES:**

Potential candidates should contact Professor Janet Brown or Professor Syed Hussain, Academic Unit of Clinical Oncology, Weston Park Hospital, Whitham Road, Sheffield S10 2SJ. Telephone: (0114) 226 5208; Fax: (0114) 226 5364; E-mail: j.e.brown@sheffield.ac.uk or syed.hussain@sheffield.ac.uk in the first instance.

## Academic Training Programme Director

Professor D O Anumba     d.o.c.anumba@sheffield.ac.uk

HEE Yorkshire & The Humber academic.yh@hee.nhs.uk

# Further Information

For more information on Sheffield see <https://www.sheffield.ac.uk/medicine-dentistry-health/study/clinical-academic-training>

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) on <https://www.nihr.ac.uk/explore-nihr/academy-programmes/integrated-academic-training.htm>

**South Yorkshire Medical Oncology Training Programme**

The rotation is based at Weston Park Hospital, Sheffield and during the rotation experience is gained within peripheral units within North Trent (Doncaster, Chesterfield, Barnsley and Rotherham).

There are six posts in total in the rotation at present. The training posts provide a comprehensive four year training programme fulfilling all the requirements of the latest curriculum in Medical Oncology.  Each trainee will rotate through a variety of posts during their clinical training.  General Medical Oncology is a feature of all posts but specialist experience will be available in each post to provide exposure to all aspects of cancer medicine together with radiotherapy and palliative care. Currently rotation occurs every six months. Entry at SpR is competitive, placing strong weight upon evidence of good progress in clinical training, including experience in cancer-related specialties such as palliative medicine, haematology and clinical oncology. Completion of core medical training and MRCP(UK) or equivalent is essential.

Individual Educational Supervision is in place in each post, and in each on-the job assessments of clinical competence take place according to curriculum requirements.  Radiotherapy training, according to the medical oncology curriculum, is in place in each post and integrated with site-specific learning.  Chemotherapy competency training and electronic assessment is provided for new starters to the scheme.

Learning includes experiential training, independent self-directed learning, and PGME, a weekly half-day taught course for first year trainees based in Leeds, Regional Oncology Study days and other study opportunities as appropriate. Assessment at RITA/ARCP is annual, including joint academic RITA/ARCP.

Training is completed in accordance with the current Curriculum.  Trainees comfortably complete the site-specific requirements of the curriculum within the first three years, allowing time for sub-specialisation and preparation for post-CCT working.

Exit requirements include a written examination (RCP Specialty Clinical Exam in Medical Oncology) based upon knowledge of the published cancer care literature. Local trainees and consultants are central to defining the syllabus and written assessments for this RCP exam.

# Weston Park Hospital

Weston Park Hospital is the base for the Oncological Service for South Yorkshire, North Nottinghamshire and North Derbyshire. It is one of the major Radiotherapy Centres in the country and is sited in the main hospital campus area of the city, within a quarter of a mile from the University, the Children’s Hospital, Jessop Hospital for Women and the Royal Hallamshire Hospital.

There are approximately 3,500 inpatient admissions per year, 20,000 daycase chemotherapy attendances and over 7000 new patients registered annually. It is a self-contained hospital unit with 82 inpatient beds.

Weston Park Hospital acts as an NSCAG supra-regional referral centre for the diagnosis and treatment of gestational trophoblastic disease and a national and European centre for the treatment of arterio-venous malformations with the stereotactic radiosurgery unit (in conjunction with the neurosurgical team).

There is a daycase chemotherapy suite which offers the opportunity to treat 28 patients at any one time. There are outpatient facilities, a radiotherapy department (see below), theatre facilities and pharmacy with a reconstitution service for cytotoxic chemotherapy. A Teenage Cancer Trust Unit for adolescents, jointly funded between the Teenage Cancer Trust and Weston Park Hospital Cancer Appeal, was completed in 2002. There is an Academic Department of Clinical Oncology, with representatives in medical oncology, radiation oncology and, most recently, surgical oncology, the latter in association with the Department of Surgery at the Royal Hallamshire Hospital.

1. Radiology

There is a diagnostic imaging department with x-ray ultrasound apparatus and impression suite facilities are provided in close association with the simulator suite and the radiotherapy department. Diagnostic isotope, CT and MRI scanning are available on site.

There is an expanding programme of cytotoxic chemotherapy. The hospital also houses a large radiotherapy and physics department and provides an ocular oncology service in conjunction with the ophthalmic surgeons at the Royal Hallamshire Hospital, who have achieved NSCAG status.

1. Radiotherapy

The hospital has excellent facilities for radiotherapy and there are facilities for the use of unsealed isotopes in therapy and diagnosis.

1. Pathological Services

Haematology and histopathology services are currently provided from the Royal Hallamshire Hospital.

A service for chemical pathology, bacteriological and other specialised investigations is provided by the appropriate departments in nearby hospitals.

Phlebotomists are employed at Weston Park Hospital for both inpatients and outpatients.

1. Outpatient Services

There are outpatient facilities within the hospital with 6 consulting suites and approximately 50% of our outpatient work is carried out at Weston Park Hospital. However, the remaining 50% are seen as outpatients in the local district general hospitals. There is an outpatient chemotherapy suite staffed by appropriately trained nurses.

There has been considerable emphasis on the need for parallel consultation in the treatment of malignant disease and joint clinic sessions are held with Consultants in other specialities including haematology, surgery, endocrinology, dermatology, gynaecology, urology, paediatrics, ENT and maxillofacial surgery.

1. Research and North Trent Cancer Service

There are excellent opportunities for clinical research, co-ordinated by the Cancer Clinical Trials Centre at Weston Park Hospital. The Cancer Clinical Trials Centre is a phase I National Cancer Research Network site. Support for health services research is provided by Sheffield University’s School for Health Related Research (ScHARR). The “North Trent Cancer Network”, which co-ordinates cancer services across all Trusts in North Trent covering a population of nearly 2 million, provides overall co-ordination of cancer developments, clinical cancer research and audit. We have recently been accorded CRUK centre status.