Job Description

NIHR Academic Clinical Fellowship

Neurology ST4 (1 post) – NIHR theme Dementia

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

This new post has been created as part of the NHS England (NHSE)/National Institution for Health Research (NIHR) programme of Integrated Academic Training and offers candidates a comprehensive experience of clinical academic medicine working alongside internationally renowned clinicians, researchers.

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 the next generation of academic clinicians. Applicants are expected to have a particular interest in Dementia or other neurodegenerative disorders such as Parkinson's disease (PD) or motor neuron disease (MND). This can include both preclinical (ie model systems, drug screens, identification of therapeutic targets) or clinical (i.e. imaging, biomarkers) research.

This Academic Clinical Fellowship (ACF) programme in Neurology will be run by the University of Sheffield, the Sheffield Teaching Hospitals NHS Trust and NHS England North East and Yorkshire.

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 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.

This post is offered under the NIHR theme of Dementia, and the research will fit into that theme.

POST DETAILS

Job Title

NIHR Academic Clinical Fellow (ACF) – Neurology

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

Department of Neuroscience

https://www.sheffield.ac.uk/neuroscience-institute

The Neuroscience Institute comprises multidisciplinary groups from Neurology, Neuropathology, Neuroimaging and Neuroscience working in both basic and clinical neuroscience. The major areas of research interest are in neurodegenerative diseases (diseases of the motor system, basal ganglia and dementia), epilepsy (including non-epileptic attack disorder), stroke and neuroinflammation. The Neurodegenerative Disease group research portfolio includes genetic, cellular, molecular and clinical research into common disorders including motor neuron diseases, Parkinson's disease, Huntington's disease and the ageing brain and dementia. The research focus is strongly translational and is primarily located in a 2,800m^2 research facility, the Sheffield Institute for Translational Neuroscience (SITraN, http://sitran.org/) which was officially opened by Her Majesty The Queen, in November 2010. Research programmes include clinical research aimed at the identification of biomarkers; disease sub-classification and stratification; personalized medicine, neuroprotective clinical trials and research aimed at innovation and improvement of symptomatic management of neurological disorders. SITraN houses a Centre for Genome Translation which integrates genetics and genomics data to sub-classify our diseases of interest, to predict drug responses and to identify new therapeutic targets.

There are strong collaborative links with other Neuroscience groups within The University of Sheffield, including: the neuroradiology group which focuses on neurodegenerative

processes (including state-of-the art ^{31}P-MR Spectroscopy); the Bateson Centre with major strengths in small invertebrate and vertebrate model systems for neurodegenerative disease (https://www.sheffield.ac.uk/bateson); the Cognitive Neuroscience and Neuroimaging groups in the Department of Psychology; and with several research groups at the Sheffield Centre for Health And Related Research (SCHARR, https://www.sheffield.ac.uk/scharr) including Public Health, Health Services Research and development of assistive technologies. There are also strong links with the Institute for In Silico Medicine (INSIGNEO, https://insigneo.org/).

In 2021, Sheffield was re-awarded a National Institute for Health (NIHR) Biomedical Research Centre which is dedicated to improving the treatment and care of people living with chronic neurological disorders (https://www.sheffieldbrc.nihr.ac.uk/). One year BRC research fellowships are available.

Research activity within the Department is supported through a broad portfolio of research funding. This includes project and programme grant support from major UK funding organizations such as the Wellcome Trust; Medical Research Council; NIHR; EU and multiple neurological and psychiatric disease related charities. Substantial funding from biotechnology and pharmaceutical companies supports our translational and clinical research programmes. The Department of Neuroscience attaches great importance to career development. We have an excellent track record of attracting prestigious external fellowship awards and six of these fellows have recently progressed to faculty positions within the Department.

The Department of Neuroscience currently has over 200 members of staff and graduate students.

Research Protected Time:

Research protected time will be based on a block release system to allow dedicated protected time away from clinical duties for academic research.

The clinical programme is designed to provide training at ST4 level for a period of 3 years and confers a run-through to Neurology specialty training CCT as a clinical-only trainee (subject to attainment of the requisite clinical competences) for a further two years.

Objectives of the Training Programme:

1. To undertake specialist training in Neurology.
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 MD/PhD programme.

Relationship between Academic and Clinical Training

The post-holder will be part of the South Yorkshire specialist registrar rotation in Neurology. A selection of placements will be undertaken in discussion with Dr Sian Price (Training Programme Director) and Dr Dan Blackburn (Academic Training Lead for Neuroscience).

Academic training will be based in the Department of Neuroscience, University of Sheffield.

Academic Clinical Fellowship Training Programme: Research Component

MAIN ACTIVITIES & RESPONSIBILITIES:

This is a 3 year full-time training post carrying a NTN(a) in Neurology. The successful applicant will have evidence of academic achievement and ideally have research experience. They should be aiming to pursue a career in academic neurology.

Research

The ACF will undertake a 9-month research period with the aim of developing pilot data to support an external PhD fellowship application e.g. to NIHR, MRC or Wellcome Trust. The research project will align with preclinical to clinical research in Alzheimer's Dementia or other neurodegenerative disorders complicated by cognitive impairment and dementia such as Parkinson's disease (PD) and motor neuron disease (MND). This can include both preclinical (ie model systems of sporadic AD, drug screens, identification of therapeutic targets) or clinical (i.e. imaging, fluid-based biomarkers, non-invasive measures such as automated assessment of language, EEG and sensors to measure gait during cognitive tasks) research.

The project can also be an educational development such as exploring what training needs GPs would need to deal with the results of automated assessment of cognition with the CognoSpeak project along with fluid-based biomarkers of amyloid and tau. For example what knowledge about functional memory problems/Mild Cognitive Impairment is needed and how to communicate this to patients and families. Also, whether GPs feel this is part of their role and their readiness to do it (focussing on their role for patients who do not need to come to memory clinic where there may be resistance to implementing this automated testing. Target studied population: GP-registrars, GP trainers. The project would also consider the role of AHPs in this pathway. A project title could be on the lines of, 'What is the perceived value of CognoSpeak amongst General practice Trainees: a mixed method study'.

Projects can be within any part of the translational research pipeline. The specific details can be finalised following appointment in consultation with Dr Blackburn and Professor Bandmann and potential academic supervisors. A wide range of academic training opportunities are available. The 9 month research period will be undertaken either as 3 three-month blocks or one 9-month block within the 3-year post.

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.

Accommodation and support for the post

Office space will be made available within the Academic Neurology Unit. Laboratory space will be made available as required.

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.

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 Programme Director for Neurology 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: Dr Daniel Blackburn and chosen academic supervisors.

Academic Clinical Fellowship Training Programme: Clinical Component

The South Yorkshire Neurology Specialty Training Programme currently has 11 clinical StRs and 4 academic trainees. The programme is of 5 years duration. During the early years the majority of this time is based at the Royal Hallamshire Hospital in Sheffield. However, trainees will in addition travel to one general neurology clinic in a district general hospital. Later in the training more independent practice is encouraged with an increase in the number of clinics in the Northern General Hospital (Sheffield), district general hospitals and non Hallamshire ward referrals. The district general hospitals included in the programme are:

- Chesterfield Royal Infirmary
- Barnsley District General
- Rotherham General
- Doncaster Royal Infirmary
- Bassetlaw Hospital

A typical weekly timetable in the first year of the programme would include 2 clinics and significant responsibility for supervising the acute neurology wards. Later in the programme trainees are encouraged to take on more responsibility to develop their subspecialty interests.

Each trainee spends 6 months on a specialty educational block. 3 months of this is spent on neurophysiology training. The other 3 months is split between neuro-rehabilitation, spinal injuries, liaison psychiatry, neuro-urology and neurosurgery.

STH TRUST NEUROSCIENCES ACADEMIC DIRECTORATE

Clinical Neurosciences Royal Hallamshire Hospital

The South Yorkshire & North Trent Clinical Neurology Network and the STH Academic Directorate of Neuroscience

Neurology Services are commissioned by NHS England as specialised services. The service provider is the Academic Directorate of Neuroscience, which includes Neurology, Neurosurgery, Stereotactic Radiosurgery and Neurophysiology and is based at the Royal Hallamshire Hospital, Sheffield, serving a population in excess of 2.2 million.

At present, 35 Consultant Neurologists, including five Professors who hold Honorary NHS Consultant contracts and 3 professors who hold honorary University contracts, provide neurological services. In addition, the Consultant Neurologists from Lincoln attend Sheffield one day a week. Clinics are held at the Royal Hallamshire and Northern General Hospitals in Sheffield and in DGHs at the following locations: Doncaster, Mexborough, Lincoln, Rotherham, Worksop, Chesterfield, Barnsley, Bakewell and Chapel-en-le-Frith.

Specialist clinics include those for people with Epilepsy, Memory & Movement Disorders, Multiple Sclerosis, Neuromuscular Disease, Motor Neurone Disorders, Vascular Diseases, Headache, Ataxia & Gluten Sensitivity, Neurogenetics and Sleep Disorders. There are also joint clinics with Ophthalmology, Rheumatology and an Epilepsy/Obstetric Clinic as well as multidisciplinary Wilson disease and Huntington's disease clinics.

There are a total of 52 neurological and 44 neurosurgical inpatient beds, including a six bedded hyper acute stroke unit, plus 20 Neuro Critical Care beds and a Day Case Investigation Unit. Inpatient facilities exist within the directorate for managing acute neurological emergencies, neurological rehabilitation and the investigation of neurological inpatients. Supporting services include Physiotherapy, Occupational Therapy, Speech Therapy and Clinical Neuropsychology Services. There are ten Specialist Registrars, two F1 trainees and five Senior House Officers in Neurology.

There are 14 Consultant Neurosurgeons with special interests including: skull base, pituitary, complex spinal surgery, neuro-oncology, epilepsy and paediatric neurosurgery. Consultant Neurosurgeons provide out patient sessions at other hospitals in the area, including Lincoln and Doncaster. Sheffield currently has 10 Specialist Registrars in neurosurgery, seven of whom are in rotation with Hull.

The National Centre for Stereotactic Radiosurgery has been based within the Directorate since 1985, under the direction of four Consultant Neurosurgeons with a special interest in radiosurgery. There is a substantial infrastructure provided by Neuroradiologists, Physicists, Technicians and Radiographers. There are close links with adult and Paediatric Neuro-oncologists, based both at Weston Park Hospital, a designated Cancer Unit, and the Sheffield Children's Hospital.

There is also a comprehensive Neurophysiological Service, including video and ambulatory EEG, EMG and evoked responses, intra-operative recording, provided by six Consultant Neurophysiologists.

The Consultant Neuroanaesthetists play an important role in managing patients in the Neuro Critical Care Facilities, in addition to supporting theatre and diagnostic activities.

There is access to extensive neuroradiological investigational and interventional facilities, including MR and CT imaging and digital angiography, with dedicated Neuroradiologists, plus support from the University's Academic Unit of Radiology.

In-patient rehabilitation facilities exist within the directorate at the Royal Hallamshire site and in Osborne 4 Ward at the Northern General Hospital. Supporting services include physiotherapy, occupational therapy, speech therapy and clinical neuropsychology.

Three honorary Consultant Neuropathologists, from the University's Department of Neuroscience, provide neuropathology services, including peripheral nerve and muscle studies.

Nurse specialists and members of the Professions Allied to Medicine provide an extensive outreach service for patients with neurological disabilities, including an outpatient head injury rehabilitation service.

There are three Consultant Paediatric Neurologists based at the Sheffield Children's Hospital, at which full operative facilities exist for Paediatric Neurosurgery.

CONTACTS

Academic Leads and Supervisors:

Dr Dan Blackburn
Academic Lead for Neurology
SITraN

d.blackburn@sheffield.ac.uk

Academic, Educational and Clinical supervisors will be assigned following appointment to align with the individual's needs

Training Programme Director (clinical):

Clinical Programme Director Dr Sian Price (sian.price@nhs.net)

Academic Training Programme Director

Professor Janet Brown j.e.brown@sheffield.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) Integrated Academic Training (IAT) page on https://www.nihr.ac.uk/explore-nihr/academy-programmes/integrated-academic-training.htm#one