ACF Neurology Details in conjunction with The University of Manchester

Post availability

There is 1 post with a research theme of Dementia in the following specialties;

- Geriatric Medicine ST1, ST4
- Neurology ST1, ST4
- General Psychiatry ST1, ST4

Overview

You can find generic information about Academic Clinical Fellowships in the North West plus links to the National Institute for Health Research's guidance via https://www.nwpgmd.nhs.uk/nihr-academic-clinical-fellowships-glance

The ACF is an NIHR/ University post which runs for 3 years with 25% protected time for research. Following this time it is expected that many candidates will apply for external grants and will be self-funding for their PhD studies. An extension of 6 months would be considered for appropriate candidates but this would be discussed on a case by case basis. In addition to externally-funded PhD studies, we have a large departmentally-funded Neurology Research Fellow PhD programme which is a natural progression for many of our ACFs. Many current Academic Neurology consultants have progressed through this programme.

Academic Training

Year 1
1. Initial clinical training in neurosciences and passing appropriate examinations (MRCP).
2. Set up supervision and programme management arrangements with academic lead, research and clinical leads.
3. Set up meetings according to the ACF Monitoring programme.
4. Register for MRes programme or other NIHR programmes in discussion with ACF supervisory team.
5. Identification of topic of interest for research project and initial literature review.
6. Identification of research questions to be addressed in pilot study, protocol development

7. Identification of specific learning needs for the project and appropriate courses.

Year 2
1. Continuing clinical training in Neurology.
2. Obtaining ethical committee and NHS Research & Development proposals for exploratory project if required.
3. Attendance at relevant internal and external training courses.
4. Initial laboratory or clinical data collection for pilot study.
5. Develop Clinical Training Fellowship application for PhD funding in conjunction with Fellowship Academy
(https://www.bmh.manchester.ac.uk/research/support/fellowships/)

Year 3
1. Continuing clinical training in Neurology.
2. Submission of Clinical Training Fellowship application to external funding agencies if not submitted at end of year 2
3. Completion of laboratory or clinical data collection and writing up of pilot research project.

Research Areas / Research Environment

In partnership with the Geoffrey Jefferson Brain Research Centre, The Manchester Centre for Clinical Neurosciences (MCCN) is one of the largest Neurology units in the world serving >3 million. There are many potential research projects for ACFs to collaborate with. All the projects would benefit from the help of an ACF both for the initial project and then potentially as a future PhD area. Please contact us on the emails below if any of these projects are of interest:-

1) Prof Monty Silverdale (NCA) and Prof Niki Ray (MMU) are collaborating on an MRC-funded research project which involves inviting participants who have had Deep Brain Stimulation to Prof Ray's laboratory at MMU. They perform various motor tasks including standing, walking and joystick tasks. The modern deep brain stimulators allow us to stream a recording of the 'brain activity' from the implanted basal ganglia electrodes which we can combine with imaging and EEG data. We are using these recordings to tease out what role the various basal ganglia structures are performing in the control of movement and how this goes wrong in movement disorders such as Parkinson's disease. We are currently one of the only labs in the world performing this type of ground-breaking research.
monty.silverdale@nca.nhs.uk
n.ray@mmu.ac.uk

2) Prof Monty Silverdale (NCA), Dr James Lilleker (NCA) and Dr Paul Warren (UoM) are collaborating on an MRC-funded research project aimed at understanding how the brain malfunctions in participants with a functional neurological disorder termed PPPD. This extremely common condition causes chronic dizziness and is the most common cause for chronic dizziness that we see in the Neurology clinic. Dr Warren's lab has expertise in assessing and quantifying how the brain processes movement of the visual scene. An abnormality of this processing mechanism would nicely explain PPPD and open up novel treatment options for an extremely common condition. We are one of the few labs in the world utilising advanced neuroscience techniques to understand FND which is becoming an increasingly important sub-specialty in Neurology.
monty.silverdale@nca.nhs.uk
James.Lilleker@nca.nhs.uk

3) Dr Rajiv Mohanraj (NCA), Prof Monty Silverdale, Dr James Lilleker (NCA) and Prof Goran Nenandic (Computer Science, UoM) are collaborating on a project using natural language processing AI techniques to code Neurology clinic visits over the last 10 years. This will be combined with GP databases, ethnicity info, deprivation info etc. The MCCN is one of the largest Neurology departments in the world with >55 consultant Neurologists covering a population of >3million. All clinics have been recorded on electronic records for more than 10 years. Once all this data is properly collated and searchable, we will most likely have access to the largest Neurology database in the world, with enormous research potential to understand Neurological disease patterns and improve treatments. We will be looking for people to work on this database as part of the initial project and with a view to future PhDs.
Rajiv.Mohanraj@nca.nhs.uk
monty.silverdale@nca.nhs.uk
James.Lilleker@nca.nhs.uk

4) Dr Rajiv Mohanraj (NCA) and the Human Pain Research group (UoM) are collaborating on a novel treatment option in functional seizures (FS). There is a significant overlap between functional seizures (FS) and chronic pain syndromes such as fibromyalgia. The Human Pain Research Group at the University of Manchester have developed novel neurotherapeutic techniques that enhance people's resting brain rhythms (alpha activity). These techniques have beneficial effects in pain disorders. Given the overlap between chronic pain and functional seizures, these techniques may also be useful for patients with FS. We are currently conducting a feasibility study of alpha entrainment in patients with FS. We plan to proceed to a formal RCT of alpha entrainment in FS in the next 12 months, which has the potential to identify new treatments for patients with functional neurological disorders.
Rajiv.Mohanraj@nca.nhs.uk

5) Dr Emily Pegg (NCA) and collaborators at the University of Manchester (UoM) are conducting a study investigating the relationship between epilepsy and menopause, with a particular focus on the interaction between hormonal changes seizure activity, and epilepsy comorbidities. The study involves collecting detailed clinical data through participant questionnaires and review of medical records. We are seeking an individual to contribute to the development and analysis of the study database during the initial project phase, with the potential for ongoing involvement and progression to a future PhD opportunity. Emily.pegg@manchester.ac.uk

6) We have led multiple therapeutic trials in PD, neurodegenerative disorders, dementia, muscle disease, motor neuron disease and epilepsy; including intravenous antibody trials, antisense trials and gene-therapy trials.

7) The Cerebral Function Unit (CFU) at MCCN is one of the leading dementia research centres in the world. Several variants of dementia were first described in Manchester and novel dementia genes were first identified here. Ongoing research focuses on Alzheimer's disease, Lewy Body Dementia, Frontotemporal dementia, Normal Pressure Hydrocephalus and atypical Parkinsonian syndromes.

Academic Programme Lead

Professor Monty Silverdale

Other Key Researchers

Dr James Lilleker
Dr Rajiv Mohanraj
Dr Christopher Kobylecki
Dr Matthew Jones
Dr Emily Pegg
Professor Perdita Barran
Professor Niki Ray
Dr Paul Warren

Research Facilities

The research post will be based in Manchester centred around the clinical provision at the Manchester Centre for Clinical Neurosciences at Salford Royal Hospital, which is part of the Northern Care Alliance NHS Foundation Trust. Long-standing and well established links exist with the academic facilities at the University of Manchester and Manchester Metropolitan University.

Clinical Training

You can find out more about the clinical training programmes in the North West via the following link - https://www.nwpgmd.nhs.uk/specialty-schools

Clinical person specifications can be found via the following link - https://specialtytraining.hee.nhs.uk/Recruitment/Person-specifications.

Useful Links
https://www.oriel.nhs.uk/Web/Vacancies
https://www.nwpgmd.nhs.uk/nihr-academic-clinical-fellowships-glance
https://medical.hee.nhs.uk/medical-training-recruitment/medical-specialty-training/person-specifications/person-specifications-2025
https://www.nwpgmd.nhs.uk/specialty-schools

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