THE UNIVERSITY OF MANCHESTER

PARTICULARS OF APPOINTMENT

FACULTY OF MEDICAL & HUMAN SCIENCES
INSTITUTE OF BRAIN, BEHAVIOUR & MENTAL HEALTH
CENTRE FOR CLINICAL & COGNITIVE NEUROSCIENCE
WOLFSON MOLECULAR IMAGING CENTRE (WMIC)

Clinical Research Fellow

Vacancy ref: **MHS-07673**

Starting salary:	£31,838 to £45,304 per annum (ACR5)
Duration:	Available immediately until 31/10/2018 in the first instance (Possible extension subject to further funding)
Based at:	The University of Manchester / Salford Royal NHS FT / Central Manchester University Hospitals NHS FT
Responsible to:	**Professor Karl Herholz** Head of Neuroscience Research
Other Accountabilities:	**Dr Alex Gerhard** Clinical Senior Lecturer **Dr Martin Punter** Honorary Senior Lecturer

JOB DESCRIPTION

Overall purpose of role

You will be the driving force leading and carry out a 3 year, National Institute for Research (EME)-funded clinical trial in neuroimaging stroke in cerebrovascular disease entitled "**Imaging cerebral neuroinflammation in acute and chronic cerebrovascular disease: a predictor of outcome and biomarker for guiding treatment (INCVD)**".

The main objective of the current clinical trial is to investigate the prognostic impact of neuroinflammation in patients with recent ischaemic stroke. This will involve the application of a novel PET tracer to demonstrate the extent and intensity of microglial activation.

The project is closely linked to the clinical stroke and neurology services, and to related imaging research projects in neurodegenerative disorders. You will be supported by a team of Clinical Trial Manager, Data Manager, Clinical Trials monitor and support staff.

Main responsibilities

Conduct of imaging studies in Patients with Ischaemic Stroke and other neurological disorders:

- Identify and recruit individuals after ischemic stroke in accordance with the study protocol from outpatient and newly admitted patients from Salford Royal NHS FT or Central Manchester UH FT.
- Clinically characterise potential participants by scales of stroke severity and disability.
- Attend training in safety procedures and radioimaging techniques.
- Coordinate and communicate scientific collaboration between the MAHSC CTU, academic and clinical study partners.

- Organize and conduct PET and MRI studies and analyse study data.
- Write-up research proposals, reports and safety assessments, publication and presentation of study results.

The list of duties in this job description is not exhaustive and is intended to outline the main activities of the post-holder. Duties and responsibilities may be subject to change taking into account the development needs and following full discussion with the post-holder.

PERSON SPECIFICATION

	Essential	Desirable
Experience	Clinical experience in neurology , stroke medicine or related cardiovascular discipline	Experience of research or clinical trials, GCP training
Qualification	Medical degree, registration with GMC	Postgraduate qualification and award of MRCP or equivalent
Skills and Knowledge& Competences	• Have excellent organizational skills and ability to prioritize and organize own workload and that of others, to work to strict deadlines, using own initiative. • Have the ability to communicate effectively, confidently and independently with physicians, scientists, administrators at all levels.	Experience of using databases Expertise in use of statistical packages and software for data analysis Have experience of functional neuroanatomy Experience of functional or structural imaging methods
Others	• Have a proactive and flexible approach to work, and be willing to undergo training and to learn new skills as required • Pay meticulous attention to detail. • Be able to work independently and as part of a team.	

OTHER INFORMATION

Disclosure & Barring Service check

This post is subject to the Rehabilitation of Offenders Act (Exceptions Order) 1975 and as such it will be necessary for a submission for Disclosure to be made to the Disclosure and Barring Service (formerly known as CRB) to check for any previous criminal convictions.

Confidentiality
Working as part of this trial team you may gain knowledge of confidential matters which may include personal and medical information about patients and staff. Such information must be considered strictly confidential and must not be discussed or disclosed unless the patient is at risk. Failure to observe this confidentiality could lead to disciplinary action being taken against you.

FURTHER BACKGROUND

The Wolfson Molecular Imaging Centre (WMIC) at the University of Manchester
The University of Manchester, centrally located within the largest student campus in the UK, was founded in 1851 and following its new Charter in October 2004, merging the Victoria University and UMIST is one of the foremost universities in the United Kingdom. It has an annual budget in excess of £350 million, with 19,000 undergraduate and 5,500 graduate students and some 6,000 staff.

The WMIC http://www.mhs.manchester.ac.uk/imagingfacilities/ (Director: Prof. Alan Jackson) has been established as a clinical research led, experimental medicine facility at the University of Manchester. Its focus is on Positron Emission Tomography (PET) based research in oncology, neurology (Leader: Prof. Karl Herholz) and psychiatry (Leader: Dr Peter Talbot) along with the development of the underlying methodology. The Centre is housed in a purpose designed four floor building encompassing a total of 3600 square metres of accommodation on the Christie Hospital site.

The WMIC is a clinical research facility based on experimental medicine to perform in- vivo measurements of molecular interactions and pathways that underlie diseased tissue and are central to therapeutic strategies. Such studies serve to translate laboratory observations of disease biology to patients. They also serve to provide “proof of concept” of the presence and accessibility of molecular therapeutic targets within diseased tissue as well as mechanisms of action and efficacies of treatment.

The WMIC is equipped with state of the art cyclotron and radiochemistry facilities including a Clinical Good Manufacturing Practice (cGMP) hot cell laboratory for tracer synthesis, the most advanced brain and body PET scanners and supporting chemical analysis laboratories, and a 1.5T magnetic resonance (MR) scanner. There is also expertise and equipment for computerised data analysis of PET and MR data. To develop and characterise new PET tracers prior to their application in patients, a whole floor has been dedicated to preclinical laboratories including a high resolution PET-CT camera and a stand-alone 3T MR camera. This provides for the two way exchange between pre-clinical and clinical research thereby supporting, under one roof, a “molecules to people” strategy.

Neuroscience at the WMIC focuses on in vivo characterisation of neurodegenerative and neurovascular disorders including extensive work on neuroinflammation imaging using a combination of advanced PET and MRI techniques.

Preclinical work concentrates on models of acute and chronic neuroinflammation and its correlation with systemic inflammation in collaboration with Professor Stuart Allen’s group.

The University of Manchester (http://www.manchester.ac.uk/) The University of Manchester is Britain’s largest and most popular university, with a distinguished history of academic achievement and an ambitious agenda for the future. The University, with income in excess of £780 million, has four Nobel Prize winners amongst its current academic staff, and has embarked on an exciting and bold course which aims to make us one of the top 25 universities in the world, as set out in the University’s strategic vision for 2020: Strategic Vision 2020. UoM has an excellent track record in research, as demonstrated by a research power exceeded only by Oxbridge in the RAE 2008 and specifically by the award of two Nobel prizes in physics in 2010.

The Faculty of Medical and Human Sciences (http://www.mhs.manchester.ac.uk/) is a leading international centre for research and education in medicine and a spectrum of health-related professions including nursing, midwifery, social work, pharmacy, dentistry, psychology, audiology and speech and language therapy.

A major review in 2011/12 led to a new strategy and structure intended to enhance our research and teaching performance. A key component of the new approach is the creation of a matrix structure linking five Faculty Schools with six Faculty Institutes. The objective is to ensure that the Faculty achieves a major international academic profile in each priority area within a period of five years.

The new strategy will focus our research effort in six priority areas:

- Human Development including Women's and Children's Health
- Cardiovascular Sciences
- Cancer Science
- Inflammation and Repair
- Brain, Behaviour and Mental Health
- Population and Health Sciences

Details of the structure can be found at: FMHS Structure.

FMHS has a total income of £210 million, around 6,500 undergraduate students and 2,500 post graduate students.

The Faculty has strong relationships with outstanding NHS partners which are critical in achieving our mission.

The Institute of Brain, Behaviour and Mental Health (http://www.bbmh.manchester.ac.uk/) comprises four Centres: Health and Risk Sciences, Clinical and Cognitive Neuroscience, Developmental Science and Disorders and Mood Disorders and Psychosis.

Our goal is to create an internationally leading institute of research and education in cognitive and mental health sciences at The University of Manchester. Our core model is one of translational research / innovation pipelines, leading from basic biological or cognitive neuroscience into models of abnormal function through to developing theory-driven interventions and evaluating them in health and disease. We will build upon centres of established and emerging expertise in developmental cognitive science and disorders; addictions and risk; health psychology; psychosis, mood and pain disorders; dementia and aphasia; visual and auditory neuroscience.

Our research uses a range of methodologies from genetics/genomics; cell biology; structural, functional and molecular brain imaging including electrophysiology; advanced biostatistics, epidemiology and informatics; though to qualitative research and implementation science.

Comprehensive Stroke Centre, Salford Royal NHS Foundation Trust (SRFT)
SRFT is an 875 bedded teaching hospital associated with the University of Manchester Medical School. The Trust provides a comprehensive range of adult services including neurosciences and is part of the Greater Manchester Stroke Network. The Stroke Centre offers experience in hyperacute and acute stroke, stroke rehabilitation and other associated specialties (neurosurgery and neuroradiology). There is also ample opportunity for a wide range of clinical experience in all aspects of neurology.