

**THE UNIVERSITY OF MANCHESTER**

**PARTICULARS OF APPOINTMENT**

**FACULTY OF BIOLOGY, MEDICINE & HEALTH**

**SCHOOL OF HEALTH SCIENCES**

**DIVISION OF INFORMATICS, IMAGING & DATA SCIENCES**

**DATA MANAGER**

**VACANCY REF: BM&H-15183**

<b>Salary:</b>	Grade 6 £32,816 to £40,322 per annum (according to relevant experience)
<b>Hours:</b>	Full Time
<b>Duration:</b>	Fixed term from Until 31 January 2022
<b>Location:</b>	Oxford Road, Manchester

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**Enquiries about the vacancy, shortlisting and interviews:**

Name: Prof Niels Peek or Prof Jørgen Vestbo or Prof Kevin Munro

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**Working for the University of Manchester**

The University of Manchester strives to make our community a welcoming, caring and enthusiastic one, fuelling ambition with opportunities and support to help us all achieve our personal and professional goals. Our diverse job opportunities include an attractive [benefits package](#) with family-friendly policies that provide for flexible working. We care deeply about career and personal development, offering a structured induction programme for new staff, an annual performance and development review, staff training for all career stages and mentoring opportunities to support your career development.

We have a genuine commitment to [equality of opportunity](#) for our staff and students, and are proud to employ a workforce that reflects the diverse community we serve. As a global institution, situated at the heart of a lively, [culturally diverse city](#), we welcome applicants of all nationalities. To help international job applicants plan for life in the UK, we have put together some useful [information on passports and visas](#), travel to the UK, accommodation and a number of other practical considerations.

**BACKGROUND**

The **NIHR Manchester Biomedical Research Centre (BRC)** is hosted by Manchester University NHS Foundation Trust in partnership with The University of Manchester, in partnership with The Christie NHS Foundation Trust and Salford Royal NHS Foundation Trust. The Manchester BRC

brings together city-wide expertise to accelerate new discoveries through translational research to improve health.

Supported by the Manchester Academic Health Science Centre (MAHSC), the Manchester BRC will deliver its research goals by applying P4 principles:

- **Prevent** disease;
- **Predict** disease progression;
- **Personalise** treatment pathways;
- Empower patients to **Participate** in their healthcare

The Manchester BRC has been awarded £28.5m (April 2017 – March 2022), to fund and support research and experimental medicine studies in the following areas:

- Theme 1: Musculoskeletal Diseases
- Theme 2: Hearing Health
- Theme 3: Respiratory Diseases
- Theme 4: Dermatology
- Theme 5: Cancer Prevention and Early Detection
- Theme 6: Advanced Radiotherapy
- Theme 7: Cancer Precision Medicine

Collaboration and synergies between these research themes is harnessed via three cross-cutting themes to drive discovery and stratification through to patient benefit: (i) a Biomarker Platform to align biomarker discovery with disease and drug response endotypes; (ii) Informatics and Data Sciences (IDS) for data-intensive discovery and actionable analytics and; (iii) a Rapid Translation Incubator to accelerate the progression of: proof-of-concept studies; early phase trials and adoption into practice.

### **Job description**

The Centre for Health Informatics leads the Informatics and Data Sciences cross-cutting theme in the Manchester BRC. The Centre is recruiting an experienced data manager who will assist in identification, transfer, storage, documentation, organisation, and access to routine health datasets for medical research.

High quality data (both structured data and clinical narrative) captured in routine electronic health records can facilitate medical research as well as service evaluation through the creation of sustainable and rich datasets. These can facilitate a better understanding of health outcomes alongside combined biomarker and phenomarker discovery, with modelling activities across bioinformatics, biostatistics, health economics and health informatics.

Several developments in electronic health records across NHS Trusts are currently in progress, with strategies for linking data across Greater Manchester, a key focus of the BRC and other research and informatics bodies. The availability and quality of routine clinical data is however variable, depending on systems, location and speciality. Although very research active, including clinical trials (both industry and investigator initiated), observational research and biomarker studies, neither the North West Lung Centre nor the Hearing Aid Group at Manchester University NHS Foundation Trust (like the majority of outpatient based specialities) do not currently capture structured electronic health data in relation to the presentation, management or outcomes of patients.

The post-holder will have a presence both at the Centre for Health Informatics and the Hearing Device Research Centre at the University of Manchester and within the North West Lung Centre at Manchester University NHS Foundation Trust, although it is estimated that more time will be spent at the Trust. We also anticipate some time spent with colleagues at the Centre for Respiratory Medicine and Allergy on the main University campus, as well as with the informatics team at MFT.

### **Key responsibilities**

The data manager will work across the Respiratory, Hearing Health, and IDS cross-cutting themes to develop an environment which facilitates the capture of key data assets to support research within the BRC programme. The post holder will be expected to gain a deep understanding of current practice and recording of patient data to identify, propose and develop opportunities to enhance structured clinical data capture within MFT. It is anticipated that the post holder will also develop relationships with key informatics personnel at MFT to ensure integration of local and Trust-wide data capture systems.

This post is designed to work across the Respiratory, Hearing Health, and IDS themes within the BRC, to draw upon the University's significant informatics assets and expertise including: the Health eResearch Centre Trustworthy Research Environment (HeRC TRE); GM Connected Health City; and the Manchester Data Science Institute. The post holder will:

- Support the delivery of research project(s) within the Respiratory and Hearing Health themes through unlocking data that are routinely captured in the NHS
- Work collaboratively across the BRC research and cross-cutting themes to support data-intensive research
- Supporting the transfer and secure storage of anonymised health datasets from NHS organisations for research purposes
- Documentation of datasets through the development of metadata catalogues
- Setting up and executing procedures for providing authorised researchers with secure access to stored datasets
- Communication with NHS organisations, researchers, and other stakeholders on data management matters
- Development and execution of the data management plans
- Data validation, including automatic checks and manual data review
- Review and provide recommendations on MFT's data sources to support BRC objectives and patient care
- Support grant applications, for example to the NIHR RfPB calls
- Facilitate and support data governance and ethics applications
- Support BRC PhD students with project set-up, troubleshooting, and start-up courses

### **Key relationships**

- BRC Respiratory theme lead (Prof Jørgen Vestbo) Hearing Health theme lead (Prof Kevin Munro), Informatics and Data Sciences theme lead (Prof Niels Peek) and key researchers ( Dr Emily Griffiths, Dr Nophar Geifman and Dr Michael Stone at the Hearing Device Research Centre,),
- Research and clinical staff at the North West Lung Centre at Manchester University NHS Foundation Trust

- BRC core management team (including Project Management, Operations Leads, Data Management, Communications and Public Programmes Teams)
- Centre for Health Informatics at The University of Manchester
- Informatics team at MFT
- Greater Manchester Connected Health City team at the University of Manchester
- BRC Executive Group, Governance Board and International Advisory Board BRC Director (as appropriate)

## **Qualification and skills required**

### **Essential Criteria**

- College or University degree
- ICT literate, with significant experience in data management and health informatics
- Experience of working with complex electronic health record data
- Experience of developing and executing data management plans
- Experience of performing data validation, including automatic checks and manual data review
- Good project management skills including planning, time management and objective setting and evaluation
- Knowledge and understanding of clinical research processes, ethics applications, methodologies and statistical techniques
- Good understanding of academic research and related clinical/medical terminology

### **Desirable Criteria**

- Experience of working at the boundary of research and practice
- Understanding of the Data Protection Act 1998, GDPR, and key confidentiality concepts
- Knowledge of GCP guidelines and relevant EU directives
- Working knowledge of the public debate over 'secondary' use of NHS data
- Excellent written and oral communication skills
- Experience with the application of text analytics methods and tools
- Experience with the application of data de-identification methods and tools
- Ability to work to tight deadlines
- Tactful, diplomatic, and flexible
- Conscientious and hardworking with the ability to work unsupervised, as part of a multidisciplinary team, and work cohesively with other data managers

## **Environment**

### **The University of Manchester**

Established in 1824, 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](#). The University has an excellent track record in research, including the award of two Nobel prizes in 2010. The University's research strategy

can be found at: [UoM Research Strategy](#). The academic structure of the University comprises [Faculties and Schools](#).

### **The Faculty of Biology, Medicine and Health (FBMH)**

<https://www.bmh.manchester.ac.uk/>

The Faculty of Biology, Medicine and Health was created on 1 August 2016 when the Faculty of Life Sciences and the Faculty of Medical and Human Sciences were brought together in a new, integrated structure to deliver a truly translational approach to the life sciences, ensuring smooth research pathways - from pure discovery science through to clinical application and patient care. With a total annual income of over £300 million, and over 3,000 members of staff, the new Faculty is comparable in size to a medium-sized UK university. Thirty undergraduate and 90 postgraduate programmes will offer our 11,000 students opportunities to develop the skills and knowledge they need for a successful career.

The Faculty's matrix structure facilitates interdisciplinary working and enables us to learn from each other and share best practice; and our eight, strategic Research Domains help to articulate our research strengths, drive large-scale, collaborative research activities and strengthen relationships with our research and healthcare partners.

The integration of discovery biology, clinical application and patient care within a single Faculty, particularly in a region with notable health inequality, provides us with a real opportunity to have a very significant and positive impact on people's lives.

### **Manchester University NHS Foundation Trust (MFT)**

From 1st October 2017, Central Manchester University Hospitals NHS Foundation Trust (CMFT) and the University Hospital of South Manchester NHS Foundation Trust (UHSM) joined together to create a new Foundation Trust which has been named Manchester University NHS Foundation Trust. Manchester University NHS Foundation Trust is a major teaching Trust with nine hospitals on a number of sites. The hospitals involved are Manchester Royal Infirmary, Manchester Royal Eye Hospital, Saint Mary's Hospital, Royal Manchester Children's Hospital and University Dental Hospital of Manchester (collectively known as the Oxford Road campus), Wythenshawe Hospital, Withington Community Hospital, Trafford General Hospital and Altrincham Hospital.

Our new organisation will provide a single hospital service across the city of Manchester and in 12- 18 months will also include the services currently provided by North Manchester General Hospital. These changes will make a real difference to the health outcomes and quality of life for the people of Manchester. That's why this really is an extremely exciting and challenging period in the delivery of health and social care in Greater Manchester and one that provides a wealth of career opportunities for great people right across our Group.

### **The Centre for Health Informatics**

The Centre for Health Informatics, led by Professor John Ainsworth, hosts the MRC Health eResearch Centre (HeRC, [www.herc.ac.uk](http://www.herc.ac.uk)). HeRC conducts world-leading research in health informatics and forms a centre of excellence in digital health innovation for North England. The Centre has a national role in driving advanced methodological research to harness health data; and to build capacity in health informatics. HeRC is a founding partner of the national Farr Institute of Health Informatics Research ([www.farrinstitute.org](http://www.farrinstitute.org)) which has been established to create a network of safe havens for deep analysis of electronic health records at UK-scale. HeRC also provides an environment for industry and academia to collaborate over UK health data, methods

and expertise in in a timely, cost effective and citizen-engaged way, benefiting the UK economy. For this purpose it is home to the Trusted Research Environment (TRE) secure data service to provide the security and privacy protection not just that the law requires, but that is fundamental to the honest broker position of the Institute, working with NHS and a range of industry partners. The Centre collaborates on a portfolio of research with over 40 projects/programmes with a value in excess of £100M. The Centre is actively involved in delivering major initiatives including: NIHR programmes, including a National Primary Care Safety Translational Research Centre; large European programmes such as EHR4CR, EMIF; and international partnerships.

### **North West Lung Centre at Manchester University NHS Foundation Trust**

The North West Lung Centre (NWLC) is the largest tertiary Lung unit in the UK. It houses more than 15 subspecialties, with world-leading clinical and academic leadership. There are over 50 consultant clinicians and 11 academic professors, working within multi-professional teams, delivering outstanding clinical care alongside cutting edge technology, and with innovative translational research for clinical benefit. NWLC teams care for 120 inpatients. It is closely connected through into community care with early discharge, rehabilitation, smoking cessation, with same day and one- stop clinics.

NWLC works closely with the basic science hub at the University of Manchester main campus, and its academics are based within the Faculty of Medicine. It houses the NIHR Biomedical Research Centre and Clinical Research Facilities in Lung Medicine. These carry out cutting edge experimental medicine and clinical trials to develop and test new treatments for patient benefit. NWLC has strong teaching programmes, from undergraduate medical and healthcare students through to postgraduate courses. The NWLC increasingly influences public health. We provide environmental leadership, from climate change, ozone layer protection, atmospheric pollutants, and tobacco control.

### **Centre for Respiratory Medicine and Allergy**

The Centre for Respiratory Medicine and Allergy covers a broad range of respiratory research with world leading researchers in COPD, chronic cough, fungal infections, and asthma in children and adolescents. The Centre is located at Wythenshawe Hospital but works extensively with Institutes at Campus, including the Manchester Collaborative Centre for Inflammation Research, the Stoller Biomarker Discovery Centre and others. A large part of the research is carried out through the Respiratory Theme of the NIHR Manchester BRC.

### **Hearing Device Research Centre, part of the NIHR Manchester Biomedical Research Centre (BRC) Hearing Health theme**

The Hearing Health theme of the Manchester BRC has three main strands to focus on prevention, diagnosis and treatment of hearing loss. This involves a multi-disciplinary collaboration between medical professionals and scientists. Within the treatment strand, the Hearing Device Research Centre looks at both systems and software of hearing devices. The underlying principle of this strand is to integrate technology with the patient and their lifestyle in order to improve outcomes from the remediation of hearing loss. One of the current projects concerns the data routinely generated by the everyday use of these devices and how it can be used to predict, monitor, and transform, outcomes for patients. The Hearing Device Research Centre is housed within the Manchester Centre for Audiology and Deafness within the University of Manchester.

### **What we can offer you**

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An exceptional benefits package including:

- Contributory pension scheme
- Life insurance
- Generous holiday allowance plus 4 closure days
- Flexible and friendly working environment including flexi-time
- Training and development opportunities
- Cycle to work scheme
- Season ticket loans for public transport
- Staff discounts on a range of services, from books to computer software to car hire
- On-campus nurseries
- Tax relief on your childcare