



**Job Title:** BHF Clinical Research Fellow in Heart Failure and Type 2 Diabetes

**Salary:** Clinical below Consultant

**Department:** Cardiovascular Sciences

**Hours/Contract:** Full-time, or job share, fixed term contract for two and a half years initially, with possibility of a further six months subject to funding

**Reference:** 10348

## Role Purpose

This post is funded by a British Heart Foundation Programme Grant awarded to Prof Gerry McCann, NIHR Research Professor, Cardiovascular Imaging Group and Biomedical Research Centre Cardiovascular Lead. You will be supervised Professor McCann and an NIHR Academic Clinical Lecturer (Dr Gaurav Gulsin). You will be based at Glenfield Hospital BHF Clinical Research Centre, with state-of-the-art NIHR clinical research facilities including a dedicated 3T CMR research scanner (BHF funded Siemens Vida installed in 2021) and a recently built Translational Medicine Facility for clinical research to support translational studies in cardiovascular MRI (CMR).

The primary project is to track progression of subclinical cardiac dysfunction detected by cardiac MRI in a multi-ethnic cohort of asymptomatic adults with type 2 diabetes (PREDICT study, ClinicalTrials.gov identifier NCT03132129). You will invite participants from the PREDICT study, who have already undergone baseline comprehensive cardiovascular phenotyping (including multiparametric stress CMR, non-contrast cardiac CT, transthoracic echocardiography, and blood biomarker analysis), for repeat assessment. This will permit assessment of longitudinal changes in cardiac structure and function, in a group at high risk of progressing to heart failure with preserved ejection fraction (HFpEF). Other strands of the research programme include cardiac and skeletal muscle <sup>31</sup>P magnetic resonance spectroscopy (led by a PhD student you will work closely with), and artificial intelligence-based cluster analyses to characterise phenogroups of type 2 diabetes most likely to develop HFpEF. This work is one of the flagship projects of the Leicester NIHR Biomedical Research Centre/BHF Centre for Research Excellence and you will work closely with colleagues in the Leicester Diabetes Centre and the Leicester Institute for Precision health.

Additionally, you will spend up to one day per week supporting Professor McCann's programme of work in asymptomatic aortic stenosis, namely his multinational BHF-funded randomised controlled trial of early valve replacement in severe asymptomatic aortic stenosis (EASY AS, NCT04204915).

## Main Duties and Responsibilities





## Research

You will be involved in all aspects of the PREDICT PROGRESSION study

### To conduct a clinical research study (PREDICT PROGRESSION)

- Primarily responsible for patient recruitment in conjunction Dr Alice Cowley
- (NIHR Clinical Research Fellow) and research delivery staff
- Supervision of the stress CMR examinations with radiographers
- Supervise and perform cardiopulmonary exercise testing in conjunction with research physiologists and BHF PhD student
- In conjunction with non-clinical PhD students supervise and analyse skeletal muscle MRI/MRS studies in diabetes and heart failure
- Enter data into the validated study database (REDcap)
- Primarily responsible for data acquisition and the analysis of all CMR data
- Work in conjunction with collaborators at the University of Edinburgh (Professor Sotirios Tsafaris) to facilitate artificial intelligence image analysis
- Perform a comprehensive literature search on progression of subclinical cardiovascular dysfunction in type 2 diabetes towards symptomatic HFpEF
- Write first drafts of papers related to the above
- You will also work with Prof McCann and his team to deliver the portfolio of studies (particularly EASY AS) and contribute to the writing of other manuscripts

It is anticipated that the work undertaken will contribute to an MD, with conversion to PhD once funding for the final six months of the post is confirmed

## Teaching

- Occasional lectures and small group teaching for students/ junior doctors

## Clinical duties

Initially attend two CMR sessions on a weekly basis for training in CMR techniques and data analysis, reducing to a once weekly session over time, as needed.

## Internal and External Relationships





## Internal

- Multi-disciplinary team at Glenfield Hospital. The academic clinical cardiovascular imaging group currently comprises two NIHR Associate Professors/two NIHR ACLs, four clinical research fellows, whose research primarily involves CMR. There are a number of additional early translational studies as well as a number of phase III clinical trials.) You will work closely with research radiographers, nurses, physiologists, the Cardiovascular Imaging Research Manager and other BRC staff

## External

- Collaborators including those in Edinburgh, Copenhagen (Denmark), Leiden (Netherlands)
- NHS patients

## Planning and Organising

- Plan and perform research on a day-to-day basis
- Register for a higher degree including completion of probation and annual reports and presentation to the higher degrees committee
- Collect, process and analyse data for the study
- Planning research publications and presentations incorporating own data and that of others

## Qualifications, Knowledge and Experience

### Essential

- MB BS or equivalent\*
- Full GMC registration \*
- Licence to practice\*
- Possessing MRCP or equivalent\*
- Good Clinical Practice certificate, or ability to obtain\*
- Have a sound knowledge of cardiac imaging\*
- Knowledge of IT, able to use Word, Excel, Access competently, evidenced by previous experience or qualification\*
- Previous training and experience in cardiology or clinical imaging or diabetes/endocrinology at ST3 level or above, or equivalent\*

### Desirable

- Current NTN in Cardiology/Imaging, or Diabetes/Endocrinology\*
- Cardiology trainee wishing to subspecialise in cardiac imaging
- Previous research experience e.g. intercalated BSc with evidence of outputs\*
- Academic potential as evidenced by undergraduate performance
- Basic Statistical knowledge and understanding
- Experience of writing scientific papers
- Previous imaging experience





**\*Criteria to be used in shortlisting candidates for interview**

**Skills, Abilities and Competencies**

**Essential**

- High level of proficiency in English, sufficient to undertake research, teaching and administrative activities utilising English Language materials and to communicate effectively with staff and students
- Ability to plan, prioritise and work on own initiative
- Excellent, fluent oral communication skills
- Evidence of good written communication skills\*
- Flexible attitude to work
- Desire to learn
- Willingness and aptitude to present work at international and national meetings
- The ability to constructively interact with other members of the research group
- The ability to complete work on time and to work to deadlines
- Self-motivation
- Good organisational skills
- Excellent team working skills
- Enthusiasm and ability to register for a higher degree\*
- Enthusiasm and willingness to participate in a generic postgraduate training programme

**Additional Requirements**

- Satisfactory enhanced DBS disclosure
- Satisfactory occupational health clearance
- Meets professional health requirements (in line with GMC standards/Good Medical Practice)
- Medical defence cover

**Contract**

This is a fixed term contract for 2.5 years. This post is required on a temporary basis for a short-term piece of work.

The commencing salary is subject to the funding available within the grant and this may be less than the appointees Specialty training salary as the post is undertaken as an Out of Programme opportunity in order to undertake a higher degree.

Where an appointee holds a national training number (NTN) and undertakes this post via an Out of Programme application they are deemed to return to their substantive NHS training post at the end of this appointment.

An honorary clinical contract will be sought from the University Hospitals of Leicester NHS Trust





(<http://www.leicestershospitals.nhs.uk/aboutus>)

Any doctor wishing to contract for additional clinical duties with an NHS Trust outside of this contract must obtain written permission from the University supervisor to ensure that this can be undertaken and will not impact on the academic contract.

### Additional Information

You must be registered with the GMC, hold a licence to practice, abide by the codes of professional practice and have appropriate cover from a medical defence organisation for the duration of your appointment. Lapsing may render you subject to disciplinary action and you cannot be lawfully employed should registration lapse. You are required by the GMC to revalidate every five years. You must therefore advise the University of your revalidation dates and provide written evidence of your satisfactory revalidation where these fall within your period of employment with the University. You are also required to abide by the codes of professional practice as detailed by the professional body GMC.

If you are an NTN holder on OOP your responsible officer will remain based at HEE, however appointees who do not hold an NTN will be required to be responsible to the Responsible Officer at UHL.

It is a fundamental condition of employment that you hold and retain an honorary contract with a recognised NHS Trust acceptable to the University for the duration of your employment. The appointment with the University will automatically terminate should an honorary NHS contract be withdrawn or otherwise come to an end.

You will be required to comply with all NHS employment checks and satisfactorily meet these requirements prior to commencement in post. You are required to comply with the appropriate occupational health procedures for the post which you are to undertake. Where the post requires that you undertake Exposure Prone Invasive Procedures any offer of employment is subject to satisfactory clearance from the Trust Occupational Health department and you cannot commence in post until satisfactory clearance has been received. Where the post does not require Exposure Prone Invasive Procedures you must provide evidence of attendance at a Trust occupational health interview within the first 3 days of commencing in post.

### NHS Research Governance Requirements

Where it is determined that the duties of this post for the purposes of research involve work with the NHS, it is necessary to ensure that the performance of the duties attached to the post are covered by NHS indemnity arrangements and the appointee must comply with all such arrangements, including occupational health clearance.

### Criminal Declaration and Disclosure and Barring Service (DBS).

If you become an employee, you must inform your manager immediately, in writing, if you are the subject of any current or future police investigations/legal proceedings, which could result in a criminal offence, conviction, caution, bind-over or charges, or warnings.





This post is exempt from the Rehabilitation of Offenders Act 1974 because the appointee will have substantial access to young people and/or vulnerable adults. Therefore, an appointment to this post will be subject to checking through the Disclosure and Barring Service (DBS). The successful applicant for this post will, therefore, be required to give consent for the University to check and obtain appropriate clearance with the DBS for the existence and content of any criminal record in the form of an Enhanced Check with Adult Workforce

Information received from the DBS and the police will be kept in strict confidence and will be destroyed once the University is satisfied in this regard.

### Supporting University Activities

As a University of Leicester citizen, you are expected to support key university activities such as clearing, graduation ceremonies, student registration and recruitment open days. We expect all staff as citizens to work flexibly across the University if required.

### University Values

**Inclusive** - We are diverse in our makeup and united in ambition. Our diversity is our strength and makes our community stronger.

**Inspiring** - We are passionate about inspiring individuals to succeed and realise their ambitions. We challenge our community to think differently, to get involved, and to constantly embrace new ideas.

**Impactful** - As Citizens of Change we will generate new ideas which deliver impact and empower our community

### Equity and Diversity

We believe that equity, diversity and inclusion is integral to a successful modern workplace. By developing and implementing policies and systems that challenge stereotypes across all aspects of our work, we have a culture that recognises and values the diverse contributions of our staff which benefits everyone. Our strong values of inclusivity and equality support our efforts to attract a diverse range of high quality staff and students, and identify our University as a progressive and innovative workplace that mainstreams equality, diversity and inclusion.

