Job Title: Leicester British Heart Foundation Centre of Research Excellence Research Associate in Epidemiology

Grade: 7
Salary: £39,355 to £45,413 per annum
Department: Leicester Real World Evidence Unit, Department of Health Sciences

Hours/Contract: Full-time, fixed term contract for 36 months
Job Family: Teaching and Research
Reference: 11568

Role Purpose

We are looking for a talented and motivated individual to join the Leicester Real World Evidence Unit to undertake a program of epidemiological research funded by the BHF Centre for Research Excellence (BHF CRE) for the Populations theme.

The Leicester Real World Evidence Unit (LRWEU) is based within the Diabetes Research Centre, and specialises in the use of large routinely collected data for observational studies in diabetes and cardiovascular disease.

This post will support our BHF CRE and be required to have expertise which aligns to this, in particular we are looking for individuals who have knowledge and experience in one or more of the following areas:

- Preparation of electronic health records data for analysis

- Analysis of real-world data from classical observational studies or electronic health records (e.g., UK Biobank, the Clinical Practice Research Datalink (CPRD), and Hospital Episodes Statistics)

- Longitudinal observational studies

- Application of statistical analysis methodologies including survival analysis, causal inference, prediction, multistate models and simulated trial methodologies

- Evidence synthesis of experimental studies to inform latter phase studies and/or personalised medicine

- Optimising the use of real-world data

The post-holder will work closely with senior academics/researchers and other team members to develop and conduct a programme of applied health research which aligns to their expertise and the requirements of the BHF CRE. They will also be expected to provide statistical support to the research studies conducted across the other areas of the LRWEU. There is also an opportunity to collaborate with other key groups within the University including the NIHR BRC, NIHR ARC East Midlands, Biostatistics and the Genetic Epidemiology groups.

The BHF CRE has been funded £3 million from October 2024 to October 2029 to carry out pioneering research bench to bedside and beyond and addressing questions of high relevance to the public and health system. Three speciality areas will cover medical advancements into **cardiovascular discovery**, **interventions** and **populations**. Our Populations theme will determine how cardiovascular diseases and multiple long-term conditions (MLTCs) are associated with each other. We will help identify who might benefit from interventions that target more than one condition at a time, and the

combinations of treatments that different patients might require. We will work with different ethnic groups to identify which treatments are best for each group.

Our overall purpose is to translate scientific breakthroughs in these areas into diagnostic tests, preventions and life-saving treatments for our patients. We do this by creating a collaborative workspace that allows scientists and clinicians to share their findings and deliver research that is relevant to both patients and the professionals who treat them.

We are keen to increase the diversity of our academic body and encourage suitable applicants from ethnic minorities, different nationalities and other diversity groups to apply.

Main Duties and Responsibilities

Research

- To undertake applied health research using routinely collected data, focusing on research questions that align with the aims of the BHF CRE
- To lead in the collection, evaluation and interpretation of the research data in experimental design and performance, and work autonomously to attain project milestones.
- To actively seek opportunities to carry out multi-disciplinary research with other research groups at the University or stakeholders external to the University, with the approval of the Principal Investigator (PI).
- To contribute to the development of the choice of techniques, critiques, approaches, models and methods and to the overall research programme by providing statistical support across BHF CRE applied projects
- To extract, clean and manage data for studies from the CPRD based on pre-specified protocols
- To evaluate study protocols
- In agreement with the line manager, liaise with project collaborators to progress the research
- To contribute to research outputs and lead in writing up research findings for dissemination amongst the research team and broader international community, and represent research group by disseminating results/findings at national and international conferences and broader community
- To develop and carry out a plan to extend an area of personal research, or contribute as a team member to the development of a broader programme, this may include contributing to the writing of research bids/grants.
- With the support of colleagues, identify opportunities to apply for fellowships and/or further project grants
- To provide guidance to other staff and students (involved in the research programme).

Professional Development

- Duties and opportunities to engage in work that support your own professional development.

- While primarily a research role, there will be opportunities to develop teaching skills by supporting teaching on the MSc Medical Statistics which may include giving short lectures or supporting computer sessions in an area of the post-holder's expertise

Impact and Knowledge Exchange

- Network and contribute to the maintaining and furthering of the wider research programme and research area
- To contribute to industry collaborations
- To consult effectively on own specialism directly with people external to the University
- To engage positively and pro-actively in research impact

Leadership and Citizenship

- Guidance to other team members; providing mentoring and coaching to Early Career Researchers and research students
- Pro-actively build networks and collaborations.

Internal and External Relationships

Regular meetings with members of the programme research group

Meeting members of the department for critical discussion of the research and exchange of new ideas and approaches that might benefit the research

Liaison with external collaborators

Planning and Organising

You will be required to effectively manage your time to plan your research activity and to deliver on the priorities of the project:

- Prioritise tasks within agreed work schedules;

- Plan for specific aspects of research incorporating issues such as deadlines, project milestones and overall research aims;

Adapt daily and weekly plans to accommodate new developments and be flexible to the changing priorities of the research project;

Qualifications, Knowledge and Experience

Essential

- PhD or equivalent experience in a relevant area (medical statistics/epidemiology)*

- Evidence of a contribution to peer-reviewed journal papers or equivalent e.g., technical report/writing a piece of software *

- Evidence of proven analytical problem-solving capability *
- Expertise in relevant approaches/models and analytical techniques and ability to develop new ones where required.

- Evidence of research productivity (including research publications, presentations)
- Experience of working with data sets in applied health research*
- An understanding of survival analysis and other methodologies commonly used in applied health research*
- Good knowledge of statistical programming and data management (Stata/R/Python)*

Skills, Abilities and Competencies

Essential

- Willingness and ability to work with internal and external stakeholders*
- Evidence of continued development of subject expertise*
- Excellent communication skills – written and verbal evidenced by the ability to communicate complex information *
- Evidence of working effectively as part of a team and the ability to work independently *
- Working towards independence and ability to be involved in collaborative research
- Evidence and commitment to Continuous Professional Development (CPD) for yourself, and encourage commitment to learn and develop in others

Desirable

- Budget management skills

Criteria to be used in shortlisting candidates for interview

Reason for Fixed Term Contract

The reason for the fixed term contract is stated in section 1.9 in the summary of contractual terms in your contract of employment.

Criminal Declaration

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.

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 equity 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 equity, diversity and inclusion.