

Job Title: Research Fellow in Medical Statistics or Epidemiology

Grade: 8

Salary: £48,350 to £54,395 per annum (pro rata if part-time)

Department: Diabetes Research Centre

Hours/Contract: Full-time, or job share considered, fixed term contract until 30th November 2027

Job Family: Teaching and Research

Reference: 9331

Role Purpose

We are looking for a talented and motivated individual to join the Lifestyle Theme of the NIHR Leicester Biomedical Research Centre (BRC) at the Diabetes Research Centre (University of Leicester). The lifestyle theme focuses on understanding how the physical behaviours that comprise the 24-hour day (from sleep to physical activity) can be harnessed in the prevention or management of long-term conditions, such as type 2 diabetes and obesity, or how they interact with common weight loss or glucose lowering therapies.

This post will lead on delivering the statistical requirements of the Lifestyle theme. We are looking for an individual who has advanced knowledge and experience of various trial designs (Phase 2 to 3) along with some experience in at least one of the following areas:

- Bayesian methodologies within clinical trials, including adaptive features.
- Mendelian randomization.
- Bioinformatics, with application to ‘-omics’ techniques that support mechanistic insight.
- Multi-level modelling with repeated measures.
- Advanced coding in R or Python.

The post-holder will work closely with senior academics/researchers and other team members to provide senior statistical support to the research studies conducted across the lifestyle Theme. There is also an opportunity to collaborate with other key groups within the University including the Real-World Evidence Unit, Biostatistics and the Genetic Epidemiology groups.

The NIHR Leicester BRC is a partnership between the University of Leicester, University Hospitals of Leicester NHS Trust, Loughborough University and the University Hospitals of Northamptonshire NHS Group. It has received funding of £26.1 million from December 2022 to November 2027 to carry out pioneering research into medical advancements into long-term chronic diseases (with specific strength in diabetes, cardiovascular diseases, respiratory diseases, cancers and ethnic health) across six research themes (<https://leicesterbrc.nihr.ac.uk/>). The Lifestyle theme is focused on the application of lifestyle behaviours to these areas of clinical focus.





Main Duties and Responsibilities

- Take a leading role in advancing the statistical requirements and expertise within the Lifestyle theme of the NIHR Leicester BRC. This may include the following activities depending on expertise:
 - Overseeing a portfolio of phase 2 to 3 clinical trials, including those employing Bayesian designs, drafting aligned statistical analysis plans.
 - Contributing to epidemiological programmes of research exploring causality, including through Mendelian randomization.
 - Harnessing genetic and proteomic data for etiological insight.
 - Developing new ideas and novel applications of advanced statistical methods.
 - Develop coding to support data processing.
- To take a lead in publishing research outputs which is assessed as internationally and world leading research as per the University Output Review Policy.
- To contribute to research proposals and to continue or expand the research programme to secure and explore potential funding streams.
- To identify opportunities to apply for fellowships and/or project grants.
- Provide statistical input into the broad portfolio of experimental research trials (e.g., pilot studies, phase 2 to phase 3 trials) either directly or through leadership/oversight of junior research statisticians.
- To provide supervision and support to PhD students.
- To coach and mentor others in area of professional expertise.
- Design and develop the work-plan required to meet deadlines related to the principal responsibilities above, including planning and prioritising personal work load several months ahead and coordinating with other teams and individuals, whilst also adapting to accommodate new developments or research directions.
- To oversee data governance, quality and analytical outputs from the research programme as appropriate.
- To actively seek opportunities to carry out multi-disciplinary research with other research groups at the University, or stakeholders external to the University.

Professional Development

- Maintain a broad knowledge of up-to-date research and scholarship in relevant fields.
- Undertake appropriate training and personal development activities to develop research skills relevant to the studies being undertaken by the research group.
- To engage in work and opportunities that support your own professional development for example through participation in relevant staff development programmes.





Impact and Knowledge Exchange

- Contribute to innovation and impact within the Diabetes Research Centre, to increase external profile as a leader in translational lifestyle research.
- Engage in external knowledge transfer, enterprise and engagement activities which increase the external profile of the research within the Diabetes Research Centre and University of Leicester
- To represent the research group by disseminating results/findings and/or promotion of the research group/expertise at national and international conferences, workshops, and the broader community.
- To disseminate and share expertise through communication and public engagement activities.
- To contribute to research impact.

Leadership and Citizenship

- Represent the Diabetes Research Centre and University of Leicester through membership of internal and external committees and groups.
- Participate in research management and administration processes.
- Be involved in the recruitment, management and development of staff and act as a mentor to colleagues.
- Contribute to the overall department by attending meetings and seminars as appropriate.
- Contribute to the overall success of the research group.
- To support outreach activities beyond the University.

Teaching

- Whilst primarily a research role, the post holder may on occasion be asked to assist with the development and/or delivery of lectures, seminars, tutorials and other classes or public presentations within their areas of expertise, in support of teaching or other education activities delivered by the Diabetes Research Centre (e.g., UoL Diabetes MSc, healthcare professional training, public education sessions etc.), as reasonably required by lead researchers or education leads.

Other

- To work within the agreed protocols, procedures and policies as defined by the research team, the University of Leicester, ICH-GCP, and research governance and ethics approvals.
- Ensure compliance with health and safety requirements in all aspects of work

Internal and External Relationships

The post holder will be situated at the Diabetes Research Centre (located at Leicester General Hospital), working primarily within the Leicester Lifestyle and Health Research Group (within which the Lifestyle theme of the NIHR Leicester BRC is strongly embedded).





Within the role, the appointee will be expected to liaise and work closely with all of the teams within the Diabetes Research Centre, external research groups that are part of the BRC Lifestyle Theme, and the other research themes across the BRC. This may include working with groups across sites at the University Hospitals of Leicester NHS Trust, and with other collaborative organisations as appropriate. This includes significant collaborations with research staff in the University of Leicester Department of Health Sciences and the Department of Cardiovascular Sciences. Furthermore, the NIHR Leicester BRC is a collaboration with Loughborough University and the post holder will work within this collaboration, supporting studies which will involve coordinating expertise between universities.

The post holder will be expected to proactively build networks and collaborations across the NIHR Leicester BRC, the Diabetes Research Centre, the College of Life Sciences and the wider University of Leicester, including participation in seminar programmes/networking events to stimulate dissemination of information and collaboration. They will also be expected to seek to establish and maintain related collaborations nationally and internationally, including through regular attendance and presentation at major national and international conferences in the research area.

Planning and Organising

The post holder will be required to manage their time effectively to deliver on the priorities of the various projects with which they are involved, designing and implementing collective workplans to meet project timelines and other deadlines. This will include supervision of junior members of the research team (staff and students), and co-ordination with other individuals and teams within and external to the Diabetes Research Centre. They will be required to adapt daily and weekly plans to accommodate new developments and be flexible to the changing priorities of the research projects.

They will also contribute to shaping the strategic direction of lifestyle research conducted within the NIHR Leicester BRC Lifestyle Theme and the Diabetes Research Centre, developing clear long-term plans for sustaining and enhancing the research programme. They may also participate in the departmental operational planning process, supporting the strategic direction of the Department and College.

Qualifications, Knowledge and Experience

Essential

- PhD in relevant area (medical statistics/epidemiology)*
- Significant research experience and skills in the research area*
- At least one of:
 - Advanced understanding of Phase 2 or 3 clinical trials*
 - Knowledge of Bayesian methodology and its application*
 - Experience of using repeated measures within clinical trials and/or epidemiology (including multi-level modelling)*
 - Experience in Mendelian randomization*
 - Experience in bioinformatics, with application to ‘-omics’ techniques that support mechanistic insight*
 - Experience of statistical coding
- Emerging/developing research profile and /or respected nationally/international profile for area of expertise *





- High quality publication profile*
- Proven track record of delivering research on time
- Postgraduate degree in Medical Statistics or equivalent*
- Excellent knowledge of statistical programming and data management (Stata/R)*
- Experience and ability to support a research team in the acquisition, evaluation and/or interpretation of data and other specialised information*
- Proficient in Microsoft Office or equivalent software, including word processing, spreadsheets, and presentations*
- Experience of collaboration or team working

Desirable

- Track record of advanced coding in R, Python or other relevant software
- Experience of research supervision at undergraduate and postgraduate level
- Experience of developing, delivering and managing international research partnerships
- Involvement in relevant internal and external committees and groups

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*
- Excellent time management skills in order to meet deadlines*
- Excellent written* and oral communication skills
- Ability to work independently and also as part of a research team
- Ability to plan, implement and deliver programmes of work
- Ability to communicate effectively with staff and students*
- Ability to work at a high level of accuracy and at high analytical sensitivity*
- Ability to interpret analytical data*
- Commitment to Personal Professional Development in subject expertise*
- Excellent interpersonal skills, to develop and maintain networks and collaborations, and work effectively as part of a team*
- Effective presentation skills
- A commitment to the delivery of high-quality supervisory service to students
- Highly motivated
- Willingness to undertake necessary training and personal development*
- Willingness to undertake necessary travel

Desirable

- Ability to work with senior staff, and to negotiate and influence where required
- Skills in coaching, mentoring and developing others, including students, early career researchers and colleagues
- Skills in pastoral care and motivation of students
- Well-developed understanding of Health and Safety regulations and procedures





***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 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.

