



Job Title: Research Associate in Statistical Genetics
Grade: 7
Salary: £39,906 to £46,049 per annum (pro rata for part time)
Department: Division of Public Health and Epidemiology
Hours/Contract: 37.5 hours/week full-time contract for 2 years Part-time applicants (minimum 0.5 WTE) or job-share will be considered.
Job Family: Teaching and Research
Reference: 13082

Role Purpose

You will take a key role in the design, development and implementation of large-scale statistical genetic and genomic epidemiology projects that underpin drug development, together with collaborating scientists.

You will join an internationally-renowned research group, funded by the Wellcome Trust, MRC, NIHR and industry collaboration, which makes extensive use of large scale linked electronic healthcare data in genomic studies and has a major focus on training and capacity building.

Key programmes of work include: an £8.8 million Wellcome Trust Discovery Award (Applying a multidisciplinary approach to defining molecular pathways in lung function impairment); research collaborations to enable drug development (such as Multi-ancestry Genomic and Phenomic studies for Drug Development at Orion Pharma) and; genome-wide association studies of common and rare variants in the EXCEED Cohort Study. All projects involve large-scale genomic and phenotype data from cohort studies and large biobanks, working collaboratively and independently as part of the Genetic Epidemiology Group and with national and international academic and industry collaborators to achieve defined milestones and produce high quality research outputs.

Main Duties and Responsibilities

Research

- Lead analyses of large-scale genome-wide association studies, phenome-wide association studies and bioinformatic analyses to inform fine mapping and functional insights for associated regions. This will include in-depth analysis of phenotype data from linked electronic healthcare records and other sources in population studies (UK Biobank, the local EXCEED study, and international studies) and genome sequencing or genotype array data, employing statistical genetic approaches, development and management of relevant databases, version control, report-writing and making significant contributions to research outputs, including journal papers, where appropriate as lead author.
- Contribute to innovative research developments that will advance understanding of the genomic determinants of human diseases, using strategic vision, supervisory skills, innovative ideas and high-level research skills as a statistical genetics researcher.
- Contribute to the development of the choice of techniques, critiques, approaches, models and methods
- To contribute to the overall research programme using innovative research models, novel approaches and techniques.





- To meet with collaborating scientists, including from industry, to present and discuss findings, and to evaluate and prioritise areas for further work and contribute to the international profile of the team by presenting research to research teams, local audiences and international conferences
- To lead in writing up research findings for dissemination amongst the research team and broader international community, and develop ideas and contributions for future grants, technical outputs.
- With the support of colleagues, identify opportunities to apply for fellowships and/or further project grants
- To provide guidance to other staff and students
- 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)
- Contribute to broader team goals such as public outreach or the development of new advanced teaching materials based on novel research

Professional Development

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

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 both research staff and students
- Pro-actively build networks and collaborations.
- Providing mentoring and coaching to Early Career Researchers and research students.

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
- Attendance and presentation of work in progress at national and international meetings of relevance to the research program.
- 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 in statistical genetics or genetic epidemiology or the equivalent professional qualification and experience *
- Experience of statistical genetics, showing knowledge of the statistical underpinning of statistical genetic methods as well as their practical application *
- Knowledge of human genomics *
- Evidence of programming competency, including use of code repositories and use of high-performance computing *
- Evidence of research productivity (including high-quality research publications and presentations) *

Desirable

- Experience of using research platform(s) of one or more major biobanks *
- Experience of analysis of electronic healthcare records, including primary healthcare records *
- Evidence of personal development of subject expertise

Skills, Abilities and Competencies

Essential

- Excellent communication skills – written and verbal evidenced by the ability to communicate complex information *
- Willingness and ability to work with internal and external stakeholders*
- Evidence of continued development of subject expertise*
- Strong quantitative and computational skills, including statistical programming (ideally R) *
- Evidence of working effectively as part of a team and the ability to work independently *
- Effective planning and organisational skills
- 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
- Collegiate member of a research team

****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 encouraged to support key university activities such as clearing, graduation ceremonies, student registration and recruitment open days. We encourage all staff as citizens to work flexibly across the University if required. If supporting these activities is likely to affect your workload, please speak to your line manager in the first instance

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

Freedom of Speech

The University is committed to upholding freedom of speech and academic freedom within the law throughout our recruitment processes. We ensure that all candidates are considered based on merit and suitability for the role, without regard to their lawful viewpoints or the expression of challenging or controversial ideas. Our recruitment policies and practices are designed to protect applicants from discrimination or adverse treatment on the basis of their opinions, and to foster an environment where open debate and diverse perspectives are valued as essential to our academic mission.

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.

