



**Job Title:** Research Associate

**Grade:** 7

**Salary:** £39,105 to £45,163 per annum, pro rata if part-time

**Department:** Population Health Sciences

**Hours/Contract:** Full-time, part-time (minimum 0.8FTE, 30 hours per week) or job share considered, fixed term contract for 30 months

**Job Family:** Teaching and Research

**Reference:** 10839

## Role Purpose

To lead the analysis of work package 1 of a new MRC programme grant (“Understanding And Solving Mucus Dysregulation In Severe Asthma For Better Clinical Outcomes”). The overall programme aims to advance our understanding of the genetic, molecular and cellular basis of mucus production in the airways of patients with severe asthma. Work package 1 focuses on using genomic data to identify key regulatory and coding variants at the chromosome 11 mucin locus driving severe asthma and pleiotropic effects. This project will involve working collaboratively and independently as part of the Genetic Epidemiology Group and with co-investigators at the Universities of Nottingham, Manchester, Imperial College London and AstraZeneca to achieve defined milestones and produce high quality research outputs.

## Main Duties and Responsibilities

### Research

- To lead analyses of large-scale genomic and phenotypic datasets in order to identify putative causal variation at loci of interest and understand how it contributes to severe asthma. This will involve statistical genetic approaches (such as fine-mapping and colocalization analysis), processing and analysis of genome sequencing data (particularly long-read) to call complex structural variation, phenome-wide association studies in population-based and asthma-specific cohorts, 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
- To 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.

\*The successful applicant will be expected to work a minimum of 2 days per week in the office (but can work flexibly from home otherwise).

### 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 (or near completion) in appropriate discipline or the equivalent professional qualification and experience \*
- Experience of techniques used in genomics, statistical genetics, and bioinformatics, with particular expertise in computational approaches to genomic analyses and genetic epidemiology \*
- Knowledge of human genomics \*
- Evidence of bioinformatic or statistical programming competency \*
- Evidence of research productivity (including high-quality research publications and presentations) \*

### Desirable

- Experience of long-read sequencing analysis and/or structural variant calling
- Evidence of personal development of subject expertise

## 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 \*
- 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 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.

