Role profile

Job title	Research Fellow (Title will be 'Research Associate' where an appointment is made before PhD is completed)	Job family and level	Research and Teaching Level 4 (Appointment will be Level 4 career training grade where an appointment is made before PhD has been completed)
School/ Department	School of Medicine, Translational Medical Sciences	Location	The Biodiscovery Institute, University Park Campus

Purpose of role

The purpose of this role will be to have specific responsibility for the delivery of research objectives and proposals associated with the Medical Research Council funded Project - Understanding And Solving Mucus Dysregulation In Severe Asthma For Better Clinical Outcomes.

The main aim of this programme of work is to advance our understanding of the genetic, molecular and cellular basis of mucus production in the airways of patients with severe asthma. This includes using a multidisciplinary approach to translate these findings to new mechanistic understanding and therapeutic opportunities. This is a collaboration between the Universities of Nottingham, Leicester, Manchester, Imperial College London and AstraZeneca.

You will be expected to plan and conduct work using approaches or methodologies and techniques appropriate to the type of research and will be responsible for writing up work for publication.

You will join a new team, led by Professors Ian Sayers and Gleb Yakubov, whose main areas of research include understanding how genetic mechanisms impact lung health and determining the biophysical properties of materials.

You will have the opportunity to use your initiative and creativity to identify areas for research, develop research methods and extend your research portfolio.

The School of Medicine recognise the importance of continuous professional development and therefore the importance of providing opportunities, structured support and encouragement to engage in professional development each year.

To find out more about the School of Medicine, its values, vision, teaching and research, please see our further information leaflet.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	**Research Responsibilities:** ▪ To manage, plan and conduct research activity relevant to the programme of research using recognised approaches, methodologies and techniques within the research area. ▪ To resolve problems, in meeting research objectives and deadlines in collaboration with others.	70%

	▪ To identify opportunities and assist in writing bids for research grant applications. Prepare proposals and applications to both external and/or internal bodies for funding, contractual or accreditation purposes.		
2	**Engagement, Communication and Continuation Responsibilities:** ▪ To keep up to date, comprehensive laboratory records documenting the research activity. ▪ To write up research work for publication and/or contribute to the dissemination at national/international conferences, resulting in successful research outputs. ▪ To collaborate with academic colleagues on areas of shared interest for example, course development, collaborative or joint research projects	20%
3	**Teaching, supervise, examine and personal tutoring:** ▪ To supervise undergraduate and/or postgraduate students projects as appropriate. ▪ To participate in the assessment of student knowledge and co-supervise projects at Masters level. ▪ You are expected to make a contribution to teaching that is in balance with wider contributions to research and other activities.	10%
4	**Other:** ▪ Any other duties appropriate to the grade and level of the role	N/A

Person specification

	Essential	Desirable
Skills	▪ Competent in histology and immunohistochemistry. ▪ Competent in immuno and radioimmunoassay assays. ▪ Highly competent in protein analysis, including Western Blotting. ▪ Excellent oral and written communication skills, including the ability to communicate with clarity on complex information. ▪ Ability to creatively apply relevant research approaches, models, techniques and methods. ▪ Ability to build relationships and collaborate with others, both internally and externally	▪ Skills in clustered regularly interspaced short palindromic repeats (CRISPR) based approaches for modification of mammalian cells. ▪ Skills in airway epithelial cell culture/models, measuring and characterising mucus. ▪ Confocal microscopy skills.

	▪ High analytical ability to analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights. ▪ Ability to assess and organise resource requirements and deploy effectively.	
Knowledge and experience	▪ Understanding of common molecular biology techniques including PCR, plasmid construction, transfection. ▪ Excellent understanding of the underlying principles of immunohistochemical laboratory techniques. ▪ An interest and publication track record in investigating gene function in mammalian cells. ▪ Some practical experience of applying the specialist skills and approaches and techniques required for the role. ▪ Experience in use of research methodologies and techniques to work within area. ▪ Comprehensive understanding of health and safety legislation. ▪ Experience of handling and analyzing large genomic datasets e.g. RNA-seq. ▪ Experience or knowledge of CRISPR/Cas9 genome editing approaches. ▪ Interest and knowledge of respiratory genetics.	▪ A publication track record in investigating respiratory genetics, candidate genes, mechanisms. ▪ Previous success in gaining support for externally funded research projects. ▪ Experience of developing new approaches, models, techniques or methods in research area. ▪ Authorship of peer reviewed publications in the field of airway cell biology and respiratory genetics. ▪ Experience of primary human airway cell and tissue culture models.
Qualifications, certification and training (relevant to role)	▪ BSc in Biochemistry/Biology or equivalent subject. ▪ PhD, or equivalent, in genomics, molecular and cell biology or related area of biological science	▪ PhD in Respiratory Genetics or similar.

	OR near to completion of a PhD in the above.	
Other	▪ Willingness to adopt the vision and values of the School of Medicine.	

Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

Valuing people	Is friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.
Taking ownership	Is clear on what needs to be done encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.
Forward thinking	Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.
Professional pride	Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.
Always inclusive	Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.

Key relationships with others

Line manager — Professor of Respiratory Molecular Genetics

Role holder — **Research Associate/ Fellow**

Key stakeholder relationships — Colleagues   Students