



Job Title: Research Associate
Grade: 7
Salary: £34,189 - £39,609 per annum
Department: Cardiovascular Sciences
Hours/Contract: Full Time open ended contract subject to fixed term funding. Funding is available from 1st August 2019 until 31st August 2022
Reference: 1155

Role Purpose

This post is associated with a BHF-funded research programme aimed to determine and utilise the molecular mechanisms involved in organ-protective effects of obesity during and after cardiac surgery. You will be working as a member of a multidisciplinary team involving medical professionals, trial managers, statisticians, bioinformaticians and biologists. The principal task will be to establish a biobank of human trial samples and analyse that resource using techniques such as ChIP, mRNA and miRNA profiling, next generation sequencing and a range of cell and molecular biology assays. The latter will be achieved in close collaboration with University of Leicester van Geest proteomics, Nucleus Genomics and bioinformatics facilities to optimise new methods and develop an analysis platform for generating and harvesting large amounts of cardiac surgery data.

The Cardiac Surgery Research Group is based in the Department of Cardiovascular Sciences which is internationally recognised for its research into a wide spectrum of cardiovascular diseases, combining both basic and clinical research, including practice-changing clinical trials. The Department hosts the Cardiovascular theme of the Leicester NIHR Biomedical Research Centre and has close links with the British Heart Foundation.

The British Heart Foundation Chair of Cardiac Surgery is held by Professor Gavin Murphy, who leads one of the largest surgical research groups in the UK. The group undertakes early translational, Phase 2 and Phase 3 trials, as well as evaluative research.

You will be expected to contribute to the experimental design and laboratory analysis plans and determining the direction of the programme in line with reaching the research goals of the research projects, develop their independent research and provide guidance to the other members of the team.

Main Duties and Responsibilities	% Time
<ul style="list-style-type: none"> To develop and carry out an original research as outlined in the funded programme grant* 	30
<ul style="list-style-type: none"> To participate in general laboratory activities, sample collection and analysis to ensure the efficient functioning of the lab* 	20
<ul style="list-style-type: none"> Perform analysis of data* 	15
<ul style="list-style-type: none"> To write up research findings for dissemination amongst the research team and broader international community 	10
<ul style="list-style-type: none"> To supervise, guide and train less experienced members of the team (i.e. act as associate supervisor for undergraduate/PhD students and technicians)* 	10
<ul style="list-style-type: none"> Extrapolate new themes/strands in area of research and contribute to team development 	5





<ul style="list-style-type: none"> To present results at scientific meetings in the UK and overseas Help the lab safety officer enforcing good safety practice in the lab *(activities performed in adherence to health and safety procedures affecting self and other at all times) 	<p>5</p> <p>5</p>
<p>Internal and External Relationships</p>	
<p>Communication with research group and PI, other colleagues and students on a regular basis to review and plan research activities.</p> <p>Initiate and maintain communications with other researchers both internal and external to Leicester University. This could include communication with other researchers and scientists elsewhere throughout the UK and overseas.</p> <p>Liaise with NHS clinical staff for sample collection and analysis.</p>	
<p>Planning and Organising</p>	
<p>The post holder will need to plan ahead to ensure the research is delivered in accordance with the overall research objectives, this may include defining tasks and schedules, organising meetings and preparing project reports.</p> <p>Plan own work and prioritise research and laboratory activities on a regular basis.</p> <p>Attend training courses as reasonably required by the PI and be proactive in terms of continued professional development.</p> <p>Responsible for the project management of the tasks and responsibilities assigned to the post holder. Maintenance of shared research laboratories and handling biological samples on a daily basis.</p>	
<p>Qualifications, Knowledge and Experience</p>	
<p>Essential</p> <ul style="list-style-type: none"> PhD in genetics, molecular or cell biology or related subject* Experience in standard techniques of molecular biology, cell biology and genomics* In-depth understanding of nucleic acid isolation from tissues and physiological fluids* Evidence of research productivity in relevant fields (e.g. research publications in peer review journals, presentations, etc.) Good report/paper writing skills <p>Desirable</p> <ul style="list-style-type: none"> Experience with CHIP assay Experience with mitochondrial biology Knowledge of molecular signalling involved in obesity and energy production pathways Supervision/management experience Financial/budget holding experience 	
<p>Skills, Abilities and Competencies</p>	
<p>Essential</p> <ul style="list-style-type: none"> Well-developed understanding of Health and Safety regulations and procedures 	





- Proven analytical and technical/scientific problem solving capability
- Good background in genomics, statistics and computer literate*
- Ability to work well in a team
- Good written and oral communication skills*
- Effective interpersonal skills*
- Ability to plan, implement and deliver multiple strands of work*
- The ability to demonstrate leadership skills throughout the team including problem solving (e.g. methodology and techniques)
- Evidence of continued personal development of subject expertise
- Ability to communicate complex information clearly*
- Effective planning and organisational skills
- To be able to demonstrate research potential and enthusiasm of the subject area and deliver high quality research
- To be able to prioritise, plan, organise and deliver a programme of work effectively and to the required standard
- Experience in supervising students
- Experience in presenting results at national/international meetings

****Criteria to be used in shortlisting candidates for interview***

VITAL

The University encourages all staff to live our [VITAL values](#) which are:
Valuing People, Innovators, Together, Accountable, Leaders.

Equality and Diversity

We believe that equality, 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.

