



Job Title: Research Associate (Chemical Adherence Testing)
Grade: 7
Salary: £39,355 per annum (capped due to funding)
Department: Cardiovascular Sciences
Hours/Contract: Full-time, one-year fixed term contract from 15th July 2025.
Job Family: Teaching and Research
Reference: 11702

Role Purpose

You will lead on the discovery aspects of the project and be instrumental in developing targeted assays using liquid chromatography tandem mass spectrometry (LC-MS/MS) for the quantification and quantitation of the identified medications. You will then apply the mass spectrometry-based assays to verify and validate the biomarkers in larger external cohorts. You will help with ongoing research and patient recruitment in this area.

You will work closely with Associate Professor Pankaj Gupta, Professor Don Jones, Dr Dan Lane, Research fellow in the area of non-adherence to medications and chemical adherence testing. The team is a world leader in the field.

You will join a dynamic and successful research group. You will be based at the University of Leicester van Geest Omics MultiOMICs facility at the Hodgkin Building in an outstanding environment. Research infrastructure includes a NIHR Biomedical Research Centre (BRC), a BHF funded Clinical Research Centre, a BHF Accelerator centre award and 4-year PhD programme, the van Geest MultiOMICs facility, a NIHR Clinical Research Facility and The National Centre for Adherence testing in the University Hospitals of Leicester NHS Trust.

Main Duties and Responsibilities

Research

You will work in the Van Geest lab. Duties will include:

- Development of novel measures of Aspirin activity using Cox-1 and Cox-2 enzymes
- Development of the pharmacokinetic research of medications
- Development of quantitative tests for non-adherence
- Help with supervision and undertaking clinical studies led by the team. These include those undertaken by PhD students in the team. Examples include studies to assess the pharmacokinetics of cardiovascular medications, development of reference ranges for RAAS and Aspirin
- Identification- of proteomic markers of long term non adherence and in patients with difficult to treat hypertension.
- Supervision of PhD students

Other roles will include:

- 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.





- To represent the research group by disseminating results/findings at national and international conferences and broader community.
- To contribute to research outputs as a co-author to journal articles, technical papers, monograph, book chapter.
- To develop and carry out a plan to extend an area of personal research, or contribute as a team member to the development of a broader programme, this may include contributing to the writing of research bids/grants.
- With the support of colleagues, identify opportunities to apply for fellowships and/or further project grants
- To provide guidance to other staff and students (involved in the research programme).
- 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).

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 (University of Leicester van Geest MultiOMICs facility)
- Meeting members of the department for critical discussion of the research and exchange of new ideas and approaches that might benefit the research
- NHS staff
- NHS patients





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 appropriate discipline (e.g. Bioinformatics, Proteomics, Metabolomics, Analytical Chemistry) or the equivalent professional qualification and experience *
- Evidence of a contribution to peer-reviewed journal papers or equivalent e.g technical report/writing a piece of software *
- Evidence of proven analytical problem-solving capability *
- Strong record in LC-MS platforms, particularly the TQ-XS triple quadrupole instrument
- Evidence of developing trial/study protocols through NHS systems (e.g., IRAS)*
- Sound statistical knowledge, with ability to program in R
- Ability to work with minimal supervision
- Current consent training or agreement to undertake
- Current GCP training or agreement to undertake

Desirable

- Previous experience of method development for medications/polar metabolites including Aspirin *
- Proven ability to write high-quality manuscripts*
- Some experience of robotics for sample preparation
- Successful supervision of undergraduate and postgraduate students
- Experience of writing scientific papers as first author

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 *
- Evidence of working effectively as part of a team and the ability to work independently *
- Working towards independence and ability to be involved in collaborative research
- Collegiate member of a research team





Desirable

- Budget management skills

****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 and Disclosure and Barring Service (DBS)

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.

This post is exempt from the Rehabilitation of Offenders Act 1974 because the appointee will have substantial access to young people and/or vulnerable adults. Therefore, an appointment to this post will be subject to checking through the Disclosure and Barring Service (DBS). The successful applicant for this post will, therefore, be required to give consent for the University to check and obtain appropriate clearance with the DBS for the existence and content of any criminal record in the form of a Standard DBS clearance.

Information received from the DBS and the police will be kept in strict confidence and will be destroyed once the University is satisfied in this regard.

NHS Research Governance

Where it is determined that the duties of this post for the purposes of research involve work with the NHS, it is necessary to ensure that the performance of the duties attached to the post are covered by NHS research governance arrangements and the appointee must comply with all such arrangements, which may include occupational health clearance and DBS clearance.

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.

