

## Candidate Information

**Position:** Technician (Grade 5)  
**School/Department:** School of Medicine, Dentistry and Biomedical Sciences  
**Reference:** 25/112490  
**Closing Date:** Monday 12 May 2025  
**Salary:** £30,948 per annum  
**Anticipated Interview Date:** Friday 23 May 2025  
**Duration:** Fixed term available for 24 months or until 31 July 2027.

### JOB PURPOSE:

To become part of the Wellcome-Wolfson Institute for Experimental Medicine working on the gut-lung axis in the lab of Dr Aoife Rodgers.

### MAJOR DUTIES:

1. Preparation and Handling of Experimental Animals: Managing mouse colonies, performing welfare checks and maintaining records. Administering agents (intraperitoneal, oral gavage), including infectious agents (intranasal). Collection of samples; bronchoalveolar lavage fluid, bone marrow, blood sample collection; ensuring proper care and monitoring of the mice throughout the study.
2. Laboratory Studies: Nanoparticle formulation. Preparing samples from in vivo and in vitro infection studies and carrying out flow cytometry, western blot, ELISA assays, microbiome analysis and reporting of results using data analysis programs.
3. Laboratory Maintenance: responsible for maintaining a clean and organised laboratory workspace; assisting in the preparation and storage of reagents and experimental materials; supporting the upkeep and maintenance of laboratory equipment. Maintain and update all general lab SOPs, risk assessments and COSHH forms, as required.
4. Documentation and Record Keeping: Ensuring accurate and detailed documentation of experimental procedures, data, and results; monitoring and advising on project costs and stock levels relating to the programme of work; collaborating with the research team to maintain organised records of the project's progress. Help with the drafting of animal licence.
5. Training and Guidance: Providing help and guidance to research students and newly appointed staff on equipment use and laboratory procedures/techniques.
6. Protocol Improvement and Compliance: contributing to improving existing lab protocols and introducing new techniques as required; understanding and complying with health and safety Regulations and helping to develop standard operating procedures for new experimental protocols.
7. Collaboration and Communication: Actively contributing to laboratory meetings and teleconferences with external partners.
8. Professional Development: attending training courses as required to enhance skills and knowledge relevant to the research project and personal growth.
9. Miscellaneous: carrying out any other duties that are appropriate to the post as may be reasonably requested by the academic leadership team.

### ESSENTIAL CRITERIA:

1. Academic and/or vocational qualifications E.g NVQ 3, 2 A levels, ONC/OND, City & Guilds level 3 or equivalents in a relevant subject.
2. Three years work experience in a relevant role to include at least 1-years' experience in handling and maintaining experimental animal models/samples from mice.

3. Three years of recent relevant work experience to include (at least THREE of the following):
  - Tissue culture
  - Microbiome analysis
  - Flow cytometry
  - Western Blotting
  - ELISA
4. Ability to work as part of a team, train staff and students and allocate work.
5. Understanding and knowledge of relevant regulations and procedures including Health and Safety requirements.
6. Laboratory management skills.
7. Good communication and interpersonal skills.
8. Ability to provide reports on project progress.
9. Must be able to grasp concepts and ideas quickly.
10. Must demonstrate a clear interest in this area of research.
11. Due to the nature of the project, must be prepared to work outside normal office hours occasionally.
12. Must be prepared to visit a collaborators lab.

**DESIRABLE CRITERIA:**

1. Degree level qualification in a relevant subject.
2. Home Office modules 1-3.
3. Demonstrated experience in conducting laboratory experiments and procedures in the field of hostpathogen interactions, microbiome or respiratory immunology.
4. Familiarity with i.p, i.n and oral gavage administrations to mice and monitoring their health throughout the study duration.
5. Collection of bronchoalveolar lavage fluid and blood samples from mice.
6. Experience of flow cytometry, microbiome analysis, western blotting.
7. Experience in in vivo infection models and in vitro.
8. Nanoparticle/microparticle formulation.

**ADDITIONAL INFORMATION:**

Informal enquiries may be directed to: Dr Caitlyn Harvey at [Caitlyn.harvey@qub.ac.uk](mailto:Caitlyn.harvey@qub.ac.uk)