Candidate Information

Position:	Technician (Part-time)
School/Department:	The Wellcome-Wolfson Institute for Experimental Medicine
Reference:	23/111310
Closing Date:	Monday 16 October 2023
Salary:	£25,641 - £26,973 pro rata per annum. Actual salary for 0.5 FTE £12,820 to £13,486 per annum
Anticipated Interview Date:	Thursday 26 October 2023
Duration:	Fixed Term (Part Time) available until 31/10/2025

JOB PURPOSE:

To become part of the Wellcome-Wolfson Institute for Experimental Medicine working on a project funded by Boehringer Ingelheim. The project seeks to validate a new therapeutic target for the treatment of diabetic retinopathy.

MAJOR DUTIES:

1. Preparation and Handling of Experimental Animals: Managing transgenic animal colonies; maintaining and handling both non-diabetic and diabetic mice; administering insulin injections; collecting blood samples; ensuring proper care and monitoring of the mice throughout the study.
2. In Vivo Preclinical Measurements: Assisting in conducting visual performance (Optomotry), vascular permeability, and electroretinography (ERG) measurements; participating in angiogenesis studies using the oxygen-induced retinopathy model; closely collaborating with other research staff to ensure accurate and unbiased data collection and recording.
3. Laboratory Studies: Preparing samples and conducting immunohistochemistry and ELISA assays; collecting tissue samples for metabolomics analysis in collaboration with the industrial partner; assisting in single-cell transcriptomic analyses using 10X Genomics scRNAseq.
4. 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.
5. 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.
6. Training and Guidance: Providing help and guidance to research students and newly appointed staff on equipment use and laboratory procedures/techniques.
7. 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.
8. Collaboration and Communication: Actively contributing to laboratory meetings and teleconferences with external partners.
9. Professional Development: attending training courses as required to enhance skills and knowledge relevant to the research project and personal growth.
10. 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 level 3, 2 A levels, ONC/OND, City & Guilds level 3 or equivalents in a relevant subject.
2. At least 2 years' relevant laboratory experience to include 1 year in handling and maintaining experimental animal models.
3. Ability to work as part of a team.
4. Good communication and interpersonal skills.
5. Must be able to grasp concepts and ideas quickly.

6. Must demonstrate a clear interest in this area of research.
7. Must be prepared to work with experimental animals and pass an animal licence training course.
8. Must be prepared to work outside normal office hours occasionally.

DESIRABLE CRITERIA:

1. Degree level qualification or equivalent in a relevant subject.
2. Home Office modules 1-3.
3. Demonstrated experience in conducting laboratory experiments and procedures, preferably in the field of biomedical research or ophthalmology.
4. Familiarity with administering IP injections to mice and monitoring their health throughout the study duration.
5. Experience in conducting visual performance assessments, such as Optomotry, and electroretinography (ERG) measurements.
6. Proficiency in immunohistochemistry (IHC) techniques and ELISA assays for the analysis of biomarkers and molecular endpoints in tissues.
7. Prior involvement in angiogenesis studies, preferably using animal models like the oxygen-induced retinopathy model.
8. Knowledge of single-cell transcriptomic analyses and experience in using technologies such as 10X Genomics scRNAseq for studying gene expression profiles.