

Candidate Information

Position: Technician (0.5 FTE, 2 years) **School/Department:** Centre for Experimental Medicine

Reference: 19/107618

Closing Date: Wednesday 31 July 2019

Salary: £24,028 to £26,243 pro rata per annum

Anticipated Interview Date: Thursday 15 August 2019

Duration: 24 months

JOB PURPOSE:

The Gene Regulation group of Dr Vijay Tiwari in the Wellcome-Wolfson Centre for Experimental Medicine is looking for an organised and technically skilled lab member. We need an enthusiastic researcher to provide efficient lab management and technical support for ongoing research in Tiwari lab on gene regulatory mechanisms underlying epithelial to mesenchymal transition and neurogenesis.

Applications are invited from highly motivated, efficient and organised individuals with a strong commitment to lab management and research. The successful candidate will have recent experience in supporting a research lab and familiarity with basic molecular biology techniques.

MAJOR DUTIES:

- 1. Design, develop and refine experimental apparatus, models or experiments in order to obtain reliable and reproducible data for various projects in the lab.
- 2. Maintaining all lab databases including Primers, liquid nitrogen, -80C, -20C, 4C, chemicals and internal and external documents.
- 3. Negotiating and receiving offers from vendors, placing orders, tracking orders and properly storing items upon arrival.
- 4. Conduct experimental procedures to a specification agreed with others including assisting others with experiments.
- 5. Prepare and carry out procedures for experiments according to Standard Operating Procedures.
- 6. Carry out analyses, critical evaluations and interpretations of experimental data and the literature using methodologies and other techniques appropriate to area of research.
- 7. Present regular progress reports on research to Pl/line manager, members of the research group/cluster, other groups within the Centre/University.
- 8. Prepare and maintain accurate and detailed laboratory records of methods, sample storage and results in a timely fashion. Interpret and discuss own results with PI/line manager and other members of the research group.
- 9. When required, contribute to the development and validation of new or improved methods/techniques and instrumentation based on technical knowledge and experience. Where necessary create new Standard Operating Procedures.
- 10. Work independently and, at various points, provide assistance in data analysis and report construction.
- 11. Provide guidance and technical support to academic, post-doctoral and student colleagues.
- 12. Train other researchers on laboratory techniques and supervise visiting students.
- 13. Interface with local and international collaborative partners on a technical level as required.
- 14. Monitor and control project costs and stock levels where appropriate. Contribute advice and information regarding the operation of internal stores and control of laboratory expenditure.
- 15. Ensure that a high standard of laboratory tidiness and cleanliness is maintained at all times.
- 16. Ensure that all staff and students comply with Health and Safety regulations.
- 17. Contribute to the development and delivery of a laboratory training programme for staff and students in collaboration with senior colleagues.
- 18. Contribute to public engagement activities.
- 19. Undertake any other reasonable duties, within the general remit of the post and competence of the post-holder, in accordance with the changing needs and demands of a dynamic research environment.

Planning and Organising:

- 1. Prioritise own work within a general plan to meet targets and deadlines.
- 2. Plan future work in consultation with Principal Investigator/line manager and other team members.
- 3. Ensure all reagents and equipment are available in advance to carry out planned work.
- 4. Plan own work schedule, responding to new pressures, adjusting priorities as needed.
- 5. Plan own day-to-day activity within framework of the agreed research programme as well as communal activities (e.g. meetings) were appropriate.
- Coordinate and liaise with other members of the research group and collaborative research groups regarding work progress and stock management.

Resource Management Responsibilities:

- 1. Ensure research resources are used in an effective and efficient manner including liaising with vendors and collaborators. This might include organisation of project/group meetings and documentation, financial monitoring, stock management/procurement, risk assessment of research activities and development of SOPs. Carry out routine administrative tasks associated with the day-to-day running of the research group in a communal lab setting including audits.
- 2. Carry out school/undergraduate/post-graduate student and visiting researcher training and supervision.
- 3. Provide ongoing technical guidance, support and skills training to colleagues and students in various experimental research methods and their application.
- 4. Be responsible for the maintenance of stocks and records where appropriate.

Internal and External Relationships:

- 1. Daily contact with Supervisor/PI/line manager, work colleagues, University staff and students.
- 2. Liaison with external consultants and collaborators in the normal course of carrying out duties of the post.

ESSENTIAL CRITERIA:

- 1. Academic or vocational qualifications (NVQ 2, 2 A Levels, ONV/OND) or equivalent qualification.
- 2. Minimum of 3 years recent laboratory work experience in relevant area.
- 3. Recent hands-on experience in tissue culture and in at least two of the following techniques:
 - 1. immunofluorescence,
 - 2. confocal microscopy,
 - 3. image analysis (ImageJ/Fiji, QuPath)
 - 4. qPCR
 - 5. Western Blot
 - 6. Histology
- 4. Recent experience in project-based research in project-relevant field.
- 5. Ability to work independently.
- 6. Experience of good record keeping in a laboratory setting.
- 7. Methodical approach to project and time management, able to meet deadlines.
- 8. meticulous in regards to experimental procedures and record keeping.
- 9. Ability to develop, trouble shoot and perform a wide range of technical duties to a very high standard.
- 10. Must be able to fully understand and construct complex protocols.
- 11. Good understanding of relevant regulations and procedures including Health and Safety requirements.
- 12. Experience in supervision and/or training of students/inexperienced colleagues.
- 13. Knowledge of ethical issues relating to research.
- 14. Good communication skills and ability to construct clear data presentation and reports to deadlines.
- 15. Ability to develop and demonstrate standard equipment and techniques.
- 16. Competent in communicating stipulated research skills essential to the post in CV/job application.
- 17. Strong ability to work from own initiative.
- 18. Excellent interpersonal skills to facilitate teamwork and communication with local and international colleagues.
- 19. Ability to prioritise own work within a general plan to meet deadlines.
- 20. Good time-keeping
- 21. Ability to carry out practical laboratory tasks to a consistently high standard.
- 22. Ability to keep accurate records and provide regular reports on project progress.
- 23. Ability to train junior staff and allocate work.
- 24. Analytical and problem solving skills.

- 25. Must demonstrate strong motivation and enthusiasm for laboratory-based research and an excellent laboratory management
- 26. Must be prepared to work outside normal working hours as necessary Irregular hours including evening, weekend and other out-of-hours working will be a component of the research at times.

DESIRABLE CRITERIA:

- 1. Degree level qualification or equivalent in biomedical sciences or closely related area
- 2. Home Office License (Module 1-4)
- 3. Recent hands-on experience with
 - 1. Managing lab orders
 - 2. Maintaining Lab Databases
 - 3. Supervising researchers
- 4. Experience in cancer biology or neurobiology research.
- 5. Experience in creating/maintaining SOP, Risk Assessment forms, COSSH.
- 6. Experience in laboratory stock management and/or stock management software.
- 7. Ability to develop a broad range of high-level technical skills.
- 8. Ability to provide on-the-job training for junior/inexperienced colleagues.
- 9. Experience presenting in scientific settings.