Candidate Information

Position:	Technician
School/Department:	The Wellcome-Wolfson Institute for Experimental Medicine
Reference:	22/110145
Closing Date:	Monday 3 October 2022
Salary:	£22,662 - £24,948 per annum
Anticipated Interview Date:	Wednesday 12 October 2022
Duration:	Fixed term available for 18 months or until 31 March 2024, whichever is sooner.

JOB PURPOSE:

To provide technical and administrative support to research activities in the lab of Prof Denise Fitzgerald within the Multiple Sclerosis research cluster. The post-holder will support laboratory research investigating mechanisms of immune-mediated myelin damage and regeneration as well as general lab, administrative and outreach duties within a highly collaborative team with external partners.

MAJOR DUTIES:

1. Work independently, and with other team members/collaborators, to plan, execute and analyse experiments, working with murine experimental models and tissues and human samples.
2. Oversee mouse colony management to include a range of practical tasks, planning, reporting and liaising with other researchers and suppliers internally and externally.
3. Work with members of the team and collaborators to provide quality technical support in a range of techniques, particularly immune and neural cell and tissue culture, microscopy, flow cytometry, cryosectioning, protein analysis, histology/immunohistochemistry, tissue isolation and preparation, PCR and image analysis.
4. Prepare and maintain accurate and detailed laboratory records of methods, resources and results in a timely fashion. Interpret and discuss research results with Principal Investigator and other members of the research group and collaborators.
5. Coordinate maintenance and updating of paperwork associated with experiments, inventory, audits, inspections and general lab activities.
6. Ensure that a high standard of laboratory tidiness and cleanliness is maintained at all times. Coordinate and be actively involved in team rotas for general maintenance of tidiness and deep cleans, and other group activities to ensure smooth running of the lab.
7. Lead and/or contribute to the development and validation of new or improved methods/techniques and instrumentation. Where necessary, create new Standard Operating Procedures and associated paperwork.
8. Carry out school/undergraduate/post-graduate student and visiting researcher training and supervision.
9. Facilitate visits of external visitors to the lab.
10. Monitor and control project stock levels to include liaising with vendors and arranging samples trials, discounts and demonstration of equipment.
11. Maintain general laboratory equipment and design and implement access plans and training for key pieces of equipment.
12. Carry out analyses, critical evaluations and interpretations of experimental data and the literature using methodologies and other techniques appropriate to area of research.
13. Present regular progress reports on research to PI/line manager, members of the research group/cluster, other groups within the Centre/University.
14. Train other researchers on laboratory techniques.
15. Contribute to public engagement activities.
16. 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.

ESSENTIAL CRITERIA:

1. Academic and/or vocational qualifications ie OND/ONC and/or NVQ level 3 in relevant subject (or equivalent).
2. 2 years recent biomedical laboratory work experience ideally in neuroimmunology, immunology or neuroscience.
3. Recent hands-on experience at least two of the following techniques:
   • Practical mouse colony management
   • Neural cell culture
   • Immunocytochemistry and fluorescence microscopy
   • Organotypic brain slice culture.
4. Recent experience in project-based research.
5. Methodical approach to project management and meticulous in regard to experimental procedures and record keeping.
6. Must be able to fully understand, construct and execute complex protocols.
7. Good understanding of relevant regulations and procedures including Health and Safety requirements.
8. Knowledge of ethical issues relating to research.
9. Good oral and written communication skills and ability to construct clear data presentations and reports to deadlines.
10. Ability to develop and demonstrate standard equipment and techniques.
11. Competent in communicating stipulated research skills essential to the post in job application.
12. Ability to communicate science to the public.
13. Excellent interpersonal skills to facilitate teamwork and communication with local and international colleagues.
14. Strong ability to work from own initiative.
15. Ability to prioritise own work within a general plan to meet deadlines.
16. Good time-keeping.
17. Ambition to develop new skills and expertise.
18. Analytical and problem-solving skills.
19. Ability to develop, trouble shoot and perform a wide range of technical duties to a very high standard.
20. Ability to work both independently and on team-based tasks.
21. Must demonstrate motivation and enthusiasm for laboratory-based research.
22. 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 in in biomedical sciences or closely related area eg neuroscience or immunology.
2. Personal licence (modules 1-3).
3. Recent hands-on experience with:
   • qPCR
   • Transmission electron microscopy
   • Confocal microscopy
   • in vitro and/or in vivo models of CNS remyelination,
   • ImageJ/Fiji/CellProfiler
   • Western blot
   • ELISA
   • Tissue dissection.
4. Experience in CNS remyelination models.
5. Experience in neuroimmunology research.
6. Experience of good record keeping in a laboratory setting including coordinating group activities in preparation for audits.
7. Experience in laboratory stock management and/or stock management software.
8. Experience in supervision and/or training of students/inexperienced colleagues.
9. Experience with generation and maintenance of COSHH forms and SOPs relevant for the laboratory.
10. Experience presenting in scientific settings.
11. Experience presenting in public engagement settings.