

Candidate Information

Position:	Technician
School/Department:	The Wellcome-Wolfson Institute for Experimental Medicine
Reference:	21/109126
Closing Date:	Monday 6 September 2021
Salary:	£21,686 - £24,174 per annum.
Anticipated Interview Date:	Friday 24 September 2021
Duration:	Fixed term contract up to 22 September 2022.

JOB PURPOSE:

To provide technical and administrative support to a range of research and outreach activities in the lab of Prof Denise Fitzgerald within the Multiple Sclerosis research cluster.

The post-holder will support a range of projects investigating mechanisms of immune-mediated myelin damage and regeneration as well as general lab, administrative and outreach duties within a highly collaborative team.

MAJOR DUTIES:

1. Oversee mouse colony management to include a range of practical tasks, planning, reporting and liaising with other researchers and suppliers internally and externally.
2. Work independently, and with other team members/collaborators, to plan, execute and analyse experiments, working with human samples and murine experimental models and tissues.
3. Work with members of the team and collaborators to provide quality technical support in a range of techniques, particularly cryosectioning, protein analysis, histology/immunohistochemistry, tissue isolation and preparation, tissue culture, microscopy and PCR.
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 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, inventory activities 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 by external visitors to the lab.
10. Monitor and control project costs and 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.

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 and collaborators.
3. Ensure all resources are available in advance to carry out planned work.
4. Plan own work schedule, responding to new pressures and adjusting priorities as needed. This key role involves exercising discretion in determining work priorities and in trouble shooting problems as and when they arise.
5. Optimise new techniques including resources required for routine use of techniques.
6. Plan own day-to-day activity within framework of the agreed research programme as well as group activities (e.g. meetings, collaborative experiments, outreach activities) where appropriate.
7. Coordinate and liaise with other members of the research group and collaborators regarding work progress, resource management and group activities.

Resource Management Responsibilities:

1. Ensure research resources are used in an effective and efficient manner including liaising with vendors and collaborators. This may include organisation of project/group meetings and documentation, financial monitoring, stock management/procurement, negotiating discounts, risk assessment of research activities and development of SOPs.
2. Carry out routine administrative tasks associated with the day-to-day running of the research group in a communal lab setting including audits.
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. Communication with external representatives and collaborators.

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 laboratory work experience.
3. Recent hands-on experience at least two of the following techniques:
 1. Mouse colony management
 2. Cryosectioning and immunohistochemical staining
 3. CNS or immune cell culture
 4. PCR/Genotyping
4. Recent experience in project-based research
5. Methodical approach to project management and meticulous in regards to experimental procedures and record keeping
6. Must be able to fully understand and construct 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 communication skills and ability to construct clear data presentation 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. Analytical and problem solving skills.
18. Ability to develop, trouble shoot and perform a wide range of technical duties to a very high standard.
19. Ability to work both independently and on team-based tasks.
20. Must demonstrate motivation and enthusiasm for laboratory-based research.
21. 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.
2. Personal licence (modules 1-3)

3. Recent hands-on experience with:
 1. Western blot
 2. Confocal microscopy,
 3. In vivo and/or in vitro models of CNS remyelination,
 4. ImageJ/Fiji
 5. Tissue perfusion
 6. Tissue dissection
4. Experience in neuroimmunology research.
5. Experience of good record keeping in a laboratory setting including coordinating group activities in preparation for audits.
6. Experience in laboratory stock management and/or stock management software.
7. Experience in supervision and/or training of students/inexperienced colleagues.
8. Experience with generation and maintenance of COSHH forms and SOPs relevant for the laboratory.
9. Experience presenting in scientific settings.
10. Experience presenting in public engagement settings.