

## **Candidate Information**

**Position:** Research Technician

School/Department: The Wellcome-Wolfson Institute for Experimental Medicine

**Reference:** 21/108583

Closing Date: Monday 25 January 2021
Salary: £24,461 - £26,715 per annum
Anticipated Interview Date: Thursday 4 February 2021

**Duration:** 12 months or until 31 March 2022 (whichever is sooner)

#### JOB PURPOSE:

The post holder will be based in the Multiple Sclerosis Research Cluster led by Prof. Denise Fitzgerald and work on an industry collaboration to provide effective and efficient technical and administrative support for ongoing research into the effects of the immune system on demyelinating disease. The post-holder will primarily be working on murine in vivo models of demyelination and remyelination. Applications are invited from highly motivated, efficient and organised individuals with a strong commitment to research. The successful candidate will have recent practical research experience working with murine in vivo models. In depth experience of electron microscopy sample processing is of significant benefit to this post.

#### **MAJOR DUTIES:**

- 1. Conduct murine in vivo experiments and resulting sample processing and train others on same as required.
- 2. Conduct experimental procedures to an agreed specification including assisting others with experiments.
- 3. Prepare and carry out procedures for experiments according to Standard Operating Procedures.
- 4. Prepare and maintain accurate and detailed laboratory records of methods, sample storage and results in an interpretable and timely fashion. Interpret and discuss own results with Principal Investigators and other members of the research cluster.
- 5. When required, contribute to the development and validation of new or improved methods/techniques and instrumentation based on technical knowledge and experience. Where necessary, revise or create new Standard Operating Procedures.
- 6. Interface regularly with members of the team to provide quality technical resource in a range of techniques, especially in the context of in vivo models and tissue sectioning, staining, imaging and analysis.
- 7. Work independently and, at various times, provide assistance in data analysis and report construction and communication.
- 8. Provide guidance and technical support to academic, post-doctoral and student colleagues.
- 9. Interface with collaborative partners on a technical and logistical level as required.
- 10. Monitor and control project costs and stock levels including animal stocks as required.
- 11. Ensure that a high standard of laboratory tidiness and cleanliness is maintained at all times.
- 12. Ensure compliance with the relevant ethical guidelines and laws.
- 13. Contribute to the development and delivery of a laboratory training programme for staff and students in collaboration with senior colleagues as required.
- 14. 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.
- 15. Attend lab meetings with local groups and industrial collaborators and maintain excellent communication among relevant teams.

# **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, other team members or line manager
- 3. Ensure all reagents and equipment are available in a timely manner to carry out planned work.
- 4. Plan own work schedule, responding to new pressures, adjusting priorities as needed. This key role involves exercising discretion in determining work priorities and in trouble shooting problems as and when they arise. Optimise techniques as required.

#### **Resource Management Responsibilities:**

- Assist with general housekeeping/stock control and procurement of core laboratory supplies and equipment. Responsibility for routine oversight and general maintenance, servicing and repairs to equipment within the relevant work area.
- 2. Support student learning and public engagement through the development and demonstration of specialised equipment and techniques.
- 3. Provide ongoing technical guidance, support and skills training to junior colleagues and students in various experimental research methods and application.
- 4. Be responsible for the maintenance of animal and sample/reagent stocks.

## **Internal and External Relationships:**

- 1. Daily contact with supervisor, work colleagues, University staff and students.
- 2. Regular liaison with external collaborators in the normal course of carrying out duties of the post.

#### **ESSENTIAL CRITERIA:**

- 1. Academic and/or vocational qualifications ie OND/ONC and/or NVQ level 3 in Neuroscience, Immunology, Regenerative Biology (or equivalent in a closely related area).
- 2. Personal licence modules 1-3 or equivalent qualification.
- 3. Three years recent laboratory work experience to include extensive experience in at least two of the following;
  - 1. murine CNS in vivo models
  - 2. transduction of primary T cells with viral vectors
  - 3. ultrathin and/or semithin sample preparation for electron microscopy.
- 4. Recent experience in complex projectbased research and ability to work independently.
- 5. Ability to develop, troubleshoot and perform a wide range of technical duties to a very high standard.
- 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. Excellent communication skills and ability to construct clear data presentation and reports, particularly for collaborative progress meetings
- 9. Ability to develop and demonstrate standard equipment and techniques.
- 10. Ability to prioritise own work within a general plan to meet deadlines.
- 11. Ability to carry out practical laboratory tasks to a consistently high standard.
- 12. Ability to keep accurate records and provide regular reports on project progress.
- 13. Ability to train junior staff and allocate work.
- 14. Analytical and problem solving skills.
- 15. Excellent interpersonal skills to facilitate teamwork and communication with local and international colleagues.
- 16. Must demonstrate motivation and enthusiasm for laboratory based research.
- 17. Must be prepared to work outside normal working hours as necessary particularly for murine in vivo studies.

### **DESIRABLE CRITERIA:**

- 1. Degree in Neuroscience, Immunology, Regenerative Biology (or closely related area).
- 2. Personal licence module 4.
- 3. Experience with CNS demyelination in vivo models, murine surgical techniques, murine anaesthesia, murine blood sampling, sample processing for electron microscopy, fluorescence microscopy, quantitative image analysis, = flow cytometric analysis of blood, T cell purification and in vitro T cell cultures, genotyping.
- 4. Experience of excellent record keeping in a laboratory setting.
- 5. Experience in neuroimmunology research.
- 6. Knowledge of ethical issues relating to research including in-depth knowledge concerning animal welfare.
- 7. Ability to develop a broad range of high-level technical skills, operate ongoing quality control and provide on-the-job training for junior/inexperienced colleagues.
- 8. Experience in creating/maintaining SOP, Risk Assessment forms, COSSH.
- 9. Experience in giving presentations to a wider scientific community (e.g. seminars, conferences).