

# **Candidate Information**

Position: School/Department: Reference: Closing Date: Salary: Anticipated Interview Date: Duration: Technician (Part Time or Full Time) School of Medicine, Dentistry and Biomedical Sciences 19/107637 Monday 22 July 2019 £24,028 to £26,243 per annum (pro rata for part time). Friday 2 August 2019 1 year

# JOB PURPOSE:

The post holder will be based in a laboratory managed by Dr Imre Lengyel, and will work alongside other staff and students to provide an effective and efficient technical service for various studies in neurodegenerative diseases, especially related to retinal degeneration, in collaboration with researchers in the United Kingdom and across different countries around the word.

### MAJOR DUTIES:

- 1. Isolating, handling and long-term culturing of various primary cells from animal and human according to SOPs and as specified in the protocols. Ensure the proper distribution of samples (specimen handling/storage, shipping/requisition).
- 2. Prepare and carry out procedures for experiments. Accurate recording of data and information is essential.
- 3. Analysis of samples using specialist analytical equipment, such as electron and confocal microscopy, multiplex protein arrays, PCR instrumentation, and interpretation and reporting of results using data analysis programs.
- 4. Prepare and maintain adequate laboratory records of methods, sample details and results in a timely fashion within specific studies. Prepare study site files and assist with routine data verification and quality control, ensuring data integrity and consistency with prescribed study protocol.
- 5. Embed, section and label with different methods animal and human tissues.
- 6. Maintain and update all general lab SOPs, risk assessments and COSHH forms.
- 7. Provide technical advice and demonstration to other staff and students on various laboratory techniques and analytical instruments as described above.
- 8. Monitor and maintain equipment, ensure regular servicing of specialist equipment to ensure it is safe to use and complies with relevant statutory safety regulations and meets relevant quality standards according to study protocols. Ensure general laboratory services tidiness.
- 9. Maintaining appropriate equipment calibration logs and temperature monitoring logs.
- 10. Prepare and maintain adequate laboratory stocks and supplies. Dispatch of biological samples and laboratory kits (including generation of kits), liaising with central laboratories, NHS trusts, contract research organisations, pharmaceutical companies and couriers.
- 11. To observe and comply with all University policies and regulations, including Health and Safety, procedures.
- 12. When required, contribute to the development and validation of new or improved methods/techniques and instrumentation to assess inflammation and infection based on technical knowledge and experience. Keep up-to-date with relevant scientific and technical developments.
- 13. Carry out any other duties which are appropriate to the post as may be reasonably requested by line manager.

### Planning and Organising:

- 1. Prioritise own work within a general plan to meet targets and deadlines.
- 2. Ensuring reagents, consumables and equipment are available for experiments.
- 3. Attend study specific training and staff training as required.

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

1. Take delegated responsibility for the maintenance of scientific equipment.

- 2. Allocate/delegate some work to others for specific activities.
- 3. Support student learning through the development and demonstration of specialised equipment and techniques.
- 4. Where appropriate carry out training of junior staff and students.

### Internal and External Relationships:

1. Daily contact with Supervisor, work colleagues, University staff and students.

# **ESSENTIAL CRITERIA:**

- 1. Academic and/or vocational qualifications ie OND/ONC and/or NVQ level 3 in relevant subject (or equivalent).
- 2. Minimum of 3 years recent relevant hands-on work experience using primary human cell cultures, molecular biology and biochemistry methods and a wide range of general laboratory methods.
- 3. Experience in handling human samples for example human eye tissues.
- 4. Experience of use of confocal microscopy and electron microscopy.
- 5. Experience in the use of laser capture microdissection.
- 6. Experience in the use of different immunohistochemical methods.
- 7. Experience in preparing tissue sections from frozen and paraffin embedded tissues.
- 8. IT literacy skills.
- 9. Understanding and knowledge of relevant regulations and procedures including Health and Safety requirements.
- 10. Good communication and interpersonal skills.
- 11. Strong attention to detail and high standards of accuracy are essential.
- 12. Ability to prioritise own work within a general plan to meet deadlines.
- 13. Ability to carry out practical laboratory tasks to a consistently high standard.
- 14. Ability to provide reports on project progress.
- 15. Ability to train staff and allocate work.
- 16. Analytical and problem solving skills.
- 17. Ability to work in a team is also essential.
- 18. Due to the nature of the projects, flexibility of working hours will be required.
- 19. The work may include travelling, therefore flexibility and willingness to travel is important.

# **DESIRABLE CRITERIA:**

- 1. Degree level qualification or equivalent in a relevant subject.
- 2. Experience in using retinal pigment epithelial cells.
- 3. Understanding of the role of zinc in biology.
- 4. Experience designing and delivering PowerPoint and poster presentations.