

Candidate Information

Position:	Laboratory Technician
School/Department:	School of Medicine, Dentistry and Biomedical Sciences
Reference:	19/107385
Closing Date:	Wednesday 8 May 2019
Salary:	£27,831 to £30,395 per annum
Anticipated Interview Date:	Wednesday 22 May 2019
Duration:	Available until 30 September 2023

JOB PURPOSE:

To provide technical and laboratory support within the Molecular Pathology and Digital Pathology Programme, in the Precision Medicine Centre of Excellence (PMCoE) at QUB. The post holder will be responsible for applying image analysis (IA) methodologies as part of the Tissue Hybridisation and Digital Pathology (TH & DP) team. Other duties may include immunohistochemical methodologies to biomarker projects within the PMCoE, be these research, industry or clinical trial projects. The post holder will contribute to preparing, constructing and staining tissue microarrays and whole tissue sections for a range of biomarkers using a range of chromogenic and fluorescent methods. S/he will be expected to be independent and creative in their approach, and to work closely with Scientific and Clinical leads of the PMC.

MAJOR DUTIES:

1. Responsible for preparing for and conducting image analysis and to remain current with developments in the rapidly changing field of biomarker assessment and digital image analysis.
2. Responsible for preparing, constructing and staining tissue microarrays and whole tissue sections for a range of biomarkers using a range of chromogenic and fluorescent methods.
3. Liaise with the academic and research staff for biomarker optimisation and quality control prior to the application to tissue microarrays and subsequent digital imaging.
4. Ensure maintenance and performance of equipment within the laboratory, including regular calibration day-to-day operation and interaction with suppliers to coordinate servicing and maintenance of instrumentation.
5. Plan and oversee the day to day technical running of the TH & DP section of the laboratory ensuring high standards are maintained in the quality of work produced to meet customer needs. Customers will include staff in the Centre and collaborators in NHS and industrial settings.
6. Ensure up to date knowledge of the scientific and technological data in the field and attend and provide appropriate training to scientific and technical staff in the team.
7. Contribute to and make recommendations in the development of new or improved methods/techniques based on technical knowledge and expertise. This will include developing Standard Operating Procedures for laboratory methods and techniques.
8. Contribute to valid records of laboratory and project activities, including validation reports, project reports and budget reports, and participate in corrective action as appropriate.
9. Supervise junior technical staff to ensure work is carried out safely and efficiently. Train staff and students involved in related projects to carry out work according to Standard Operating Procedures and ensure best use of resources.
10. Support academic and research staff in the use of a range of instrumentation that will be used within the cellular biomarker research programme across a wide variety of tissue biomarker analysis projects.
11. Maintain records and oversee budget accounting of supplies and consumables: monitor their use and ensure appropriate forward planning of experiments under the direction of the Scientific and Clinical Leads.
12. Liaise with other senior technical staff and specialists in QUB and our UK collaborative partners to ensure effective integration, standardisation and service support in tissue hybridization and digital pathology.

13. Develop knowledge and maintain an up-to-date understanding of the use of human tissue and digital pathology according to the Human Tissue Act 2004 and accreditation standards such as, CLIA, ISO18159(2012) and understand the ethical issues relating to digital pathology.
14. Ensure group compliance with good clinical practice, good laboratory practice, ethical, governance and regulatory guidelines in the delivery of a busy digital pathology research programme.
15. Contribute to manuscript preparations, reports and other publication outputs and be responsible for ensuring the accuracy of the technical content disseminated.

Planning and Organising:

1. Prioritise own work on a day-to-day basis and liaise with colleagues to co-ordinate the service provision and research projects.
2. Plan with the Clinical and Scientific Leads to ensure the successful delivery of specific project.
3. Contribute to group planning.
4. Contribute to the writing of SOPs and regulatory compliance including overseeing visits from regulatory organisations.

Resource Management Responsibilities:

1. To be involved in the mentoring and training of junior technical staff and scientists using in the laboratory and imaging resources.
2. Prioritise own work on a day-to-day basis to determine technical/workload priorities and help allocate resources.
3. Ensure all resources are in place for the running of tissue imaging and Digital Pathology Programme and ensure they are used in an effective and efficient manner.
4. Manage the digital image archives, such as that generated from digital scanning.
5. Provide training and guidance to other clinical, academic and support staff who will use the histology, imaging and digital pathology facilities.

Internal and External Relationships:

1. Liaise on a regular basis with professionals, internal and external to the university.
2. Present ongoing activity and results regularly at departmental and laboratory meetings.
3. Work closely with the TH & DP Clinical & Scientific Leads to ensure consistency of approach.
4. Regular reporting to and communication with the TH & DP Clinical & Scientific Leads.
5. Regular liaison with other sections and teams.
6. Participate in and develop external networks, and build relationships with stakeholders and partners who contribute to the PMCoE.
7. Liaise on a regular basis with colleagues, students and research teams.
8. Build internal contacts and participate in internal networks for the exchange of information.
9. Attend external meetings and conferences to learn the latest techniques, present the activities of the PMCoE and share information and ideas.

ESSENTIAL CRITERIA:

1. Academic and/or vocational qualifications ie HND/HNC and/or NVQ level 4 in relevant subject (or equivalent)).
2. 4 years relevant experience to include: experience in a laboratory environment (molecular and/or histology and/or digital pathology) to include 2 years' experience in microscopy, digital pathology and image analysis, in particular, in running complex imaging equipment.
3. Experience in collaborating with other researchers or external stakeholders.
4. Experience in communicating project progress and results.
5. Knowledge of histology.
6. Knowledge of the Human Tissue Act 2004 (HTA).
7. Ability to understand the technical needs of academic and research staff and students.
8. IT skills and knowledge of clinical and research databases.
9. Ability to train staff and students in use of equipment and techniques in area of expertise.
10. Ability to support multi-professional and multi-disciplinary teams.
11. Good organising skills.
12. Knowledge of COSHH and other H&S regulations.
13. Excellent verbal and written communicating skills.
14. Ability to plan, organise and prioritise work and meet deadlines.
15. Team worker, highly motivated, supportive of colleagues within the group.

16. Ability to show initiative and work independently when required.
17. Occasional work outside normal working hours.
18. Willingness to be trained in new technologies.

DESIRABLE CRITERIA:

1. Degree in a related subject
2. Experience in Tissue Microarray construction.
3. Experience in presenting at scientific or industrial conferences.
4. A publication history commensurate with experience.
5. Working with multiple external partners to deliver a research programme.
6. Experience of delivering tutorials.
7. Supervisory skills and experience.
8. Experience of presenting externally at conferences or to industry/collaborative partners.
9. Supervisory skills.