

Candidate Information

Position: Technician (Bioinformatics)

School/Department: Patrick G Johnston Centre for Cancer Research

Reference: 22/109932

Closing Date: Thursday 14 July 2022 Salary: £28,756 - £33,309 per annum

Anticipated Interview Date: Tuesday 26 July 2022

Duration: 12 Months

JOB PURPOSE:

To support SMDBS researchers in the implementation of non-routine genomics assays, as well as creating data-processing and analysis pipelines to enable data interpretation. The postholder will develop and validate genomic methodologies and protocols for research use within the PGJCCR, and the wider School of Medicine, Dentistry and Biomedical Sciences. They will also contribute to teaching and research supervision within the School and will contribute to manuscript and grant writing.

MAJOR DUTIES:

- To work alongside and report to the PGJCCR Applied Genomics Hub (AGH) Academic Lead ensuring the effective and efficient running of the AGH for a range of QUB staff and students to implement a variety of state-of-the-art Next Generation sequencing (NGS) workflows, including CLIP-seq, capture-HiC and ATAC-seq for the analysis of cancer genomes.
- 2. Direct, train and support staff and students to ensure work is carried out to the required standard and timescale.
- 3. Ensure up to date knowledge of scientific data and technological developments in the field of cancer genomics in order to develop and implement state of the art analysis pipelines for a range of NGS experiments.
- 4. Support the development and delivery of courses to ensure users are kept up to date with new developments in cancer genomic protocols and analysis.
- 5. Help in the training of students, junior researchers, and technical staff in wet-lab NGS techniques and bioinformatic analysis.
- 6. To work as part of the team and have excellent communication with colleagues and supervisors.
- 7. To present progress reports to the team and supervisor regularly as well as external audiences.
- 8. Any other reasonable duties within the general scope of the post and competence of post-holder.

ESSENTIAL CRITERIA:

- *Academic and/or vocational qualifications i.e. HND/HNC and/or NVQ level 4 in relevant subject (or equivalent); OR
 *Substantial relevant experience.
- 2. *4 years relevant experience to include:
 - Relevant experience in cancer genetics / genomics.
 - At least 1 years; experience of working with Illumina Platforms.
 - At least 3 years' experience of working with Linux/UNIX environments.
- 3. *Experience of programming (PERL, python, R and Shell scripting) and data processing.
- 4. *Experience with Open Source software and packages.
- 5. *Significant experience designing, developing, managing, and analysing NGS methodologies, technologies, and data.
- 6. Excellent organisation and time management skills and ability to plan and organise short term activities.
- 7. Excellent oral, communication and interpersonal skills.
- 8. Must demonstrate good team working skills.
- 9. Organised and attentive to detail and ability to meet deadlines.
- 10. Good communication and interpersonal skills.
- 11. Demonstrates attention to detail and works to exceptional levels of accuracy whilst under pressure.
- 12. Be capable of using own initiative.
- 13. Ability to work in a team and as an individual.

14. Ability to plan own work schedule responding to new pressures and adjusting priorities.

DESIRABLE CRITERIA:

- 1. *A degree in biomedical sciences, statistics, computer science, or related subject or substantial relevant experience.
- 2. *PhD in Genetics, Bioinformatics or a closely related area.
- 3. *Specific experience with both DNA and RNA sequencing (library prep, quality control, data analysis and interpretation).
- 4. *Experience of compliance with data protection policies.
- 5. *Use of computer clustering, parallelisation and job scheduling (e.g. LSF, PBS, SGE, SLURM).
- 6. *Experience of delivering lectures / tutorials.
- 7. *Experience in analysis of large sequencing datasets.
- 8. *Evidence of experience in disseminating research findings to non-academic audiences (e.g. writing of reports).