



Candidate Information

Position:	Bioinformatics Technician, Patrick G Johnston Centre for Cancer Research
School/Department:	Patrick G Johnston Centre for Cancer Research
Reference:	23/110816
Closing Date:	Monday 1 May 2023
Salary:	£30,619 per annum.
Anticipated Interview Date:	Wednesday 17 May 2023
Duration:	Fixed term, available until 31 October 2024

JOB PURPOSE:

The post-holder will work alongside the Precision Medicine Centre of Excellence's (PMC) Bioinformatics and Scientific Leads to develop, validate and maintain data analysis pipelines and algorithms to analyse genomic information from cancer specimens, in the context of clinical studies and clinical trials. The PMC provides an integrated cancer diagnostic service, encompassing high throughput genomics, digital pathology and big data analytics in a fully integrated fashion (www.qub.ac.uk/research-centres/PMC).

MAJOR DUTIES:

1. To work alongside the PMC Bioinformatics lead in developing and maintaining pipelines for the processing and analysis of data generated from next generation sequencing (NGS) platform, calling of variants including structural aberrations and other clinically relevant genomic alterations.
2. To perform routine quality control tasks (quality check of data, code review, software validation) and taking remedial action when required and as directed by senior staff.
3. To implement and integrate third-party software as part of an analysis pipeline.
4. To support end-users on technical issues relating to in-house analysis workflows and analytical procedures.
5. To maintain valid records of bioinformatics activities and organise corrective action as appropriate.
6. To contribute to writing of documents describing analytical procedures and software validation process/outcomes.
7. To present progress reports to the team and supervisor regularly as well as external audiences.
8. To keep abreast of the field by reading scientific literature and attending relevant meetings when possible.
9. Any other reasonable duties within the general scope of the post and competence of post-holder.

ESSENTIAL CRITERIA:

1. * Academic and/or vocational qualifications i.e. HND/HNC, and/or NVQ level 4 in a relevant subject (or equivalent).
2. * At least 4 years' relevant work experience in a relevant technical/scientific role.
3. • Experience working with Linux/UNIX environments.
4. * Experiences in managing and analysing NGS data.
5. * Proficiency with at least one programming languages such as perl, python, bash and/or R.
6. * Compliance with data protection policies.
7. Comprehensive technical knowledge and experience in own scientific or technical specialism.
8. Demonstrable skills in collecting, reviewing, analysing, and interpreting data and ability to assess data quality.
9. Excellent organisation and time management skills and ability to plan and organise short term activities.
10. Be responsible for ensuring work is completed to the required timescales and standards.
11. Excellent verbal and written communication and interpersonal skills.
12. Excellent team working skills.
13. Ability to plan, organise and prioritise work to meet targets and deadlines.
14. Proven analytical and problem-solving skills and experience.
15. Ability to work within established procedures but with minimal supervision.
16. Ability to show initiative and work independently when required.
17. Team worker, highly motivated, supportive of colleagues within the group.

18. Willingness to work in a clinical environment, conforming to regulatory requirements.
19. Willingness to work outside normal working hours occasionally, when and as required.

DESIRABLE CRITERIA:

1. * BSc or higher in Bioinformatics, Biostatistics, Genomics, Computing science or related discipline.
2. * Experience with high performance computing systems.
3. * Experience of using version control system such as Git.
4. * Experience of workflow management framework and/or container system.
5. * Experienced of developing analysis pipelines on high performance computing clusters.
6. Good working knowledge of high-throughput sequencing data analysis methods.
7. Good working knowledge of high-performance computing systems and job scheduling.
8. Evidence of experience in disseminating research findings.