



Candidate Information

Position:	Bioinformatician Technician
School/Department:	School of Medicine, Dentistry and Biomedical Sciences
Reference:	19/107576
Closing Date:	Wednesday 24 July 2019
Salary:	£27,831 - £32,236 per annum (potential to progress to £35,210 per annum through sustained exceptional contribution)
Anticipated Interview Date:	Friday 2 August 2019
Duration:	12 months

JOB PURPOSE:

The post holder will work on a range of projects within the Units to develop, validate and maintain analytical tools, data analysis pipelines and algorithms. They will analyse data generated from Next Generation sequencing and associated workflows using the Illumina platforms, suitable for service delivery. The post will also produce correlating biological findings with biological outcomes and integration with other datasets such as expression profiling.

MAJOR DUTIES:

1. To work alongside the Lab Manager in the production and the management of data for a wide range of both internal (QUB staff and students) and external customers on up to date Next Generation sequencing workflows and related procedures.
2. To develop pipelines for the processing and analysis of raw data from Next Generation Sequencing, and any new platforms brought into the unit (There is a specific focus on RNA, exome, whole genome and single cell sequencing).
3. To perform quality control analysis.
4. Implement and integrate third-party software as part of an analysis pipeline.
5. To support end-users (scientists, bio-informaticians, biostatisticians) in analysis, management and retrieval of data to ensure data is appropriate, and meets all standards for peer-reviewed publications.
6. To maintain valid records of bioinformatics activities, and organise corrective action as appropriate.
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.

Planning and Organising:

1. Prioritise own work to ensure the GCTU services are delivered in a timely manner within a general plan to meet targets and deadlines.
2. Plan future work in consultation with the CTU manager.
3. Establish and adhere to an appropriate schedule for customer's projects.
4. Establish and adhere an appropriate schedule of training for CTU users.
5. Maintaining knowledge of current and emerging data management, analytic, statistical and visual technologies and initiatives to maximise the use of the collected data.
6. Assume delegated responsibilities as appropriate.

Resource Management Responsibilities:

1. Ensure resources are used in an effective and efficient manner taking delegated responsibility for the maintenance of any of the software packages and pipelines within the unit.
2. Work closely with academic and non-academic staff, such as the HBS and QUB information compliance unit to resolve data access or data quality issues.
3. Meet internal and external subject matter experts to develop knowledge and understanding and form relationships required to work effectively.

4. Attend and contribute to relevant meetings.
5. Carry out training on pipeline developed by the unit.
6. Maintain a log of use for billing purposes.
7. Daily contact with CTU Manager, University staff (particularly members of the CTU User group) and students.

ESSENTIAL CRITERIA:

1. A degree in biomedical sciences, statistics, computer science, or related subject.
2. Three years relevant research experience in genomics managing and analysing NGS data and other big data (must include RNA Seq and DNA seq workflows).
3. At least 2 years' experience of working with the following: -
 - Illumina Platforms.
 - In a quality controlled environment.
 - With Linux/UNIX environments.
 - With suitable analysis and plotting languages, particularly R or Matlab.
 - With Open Source software and packages.
 - Compliance with data protection policies.
4. Demonstrable skills in collecting, reviewing, analysing, and interpreting data and ability to assess data quality.
5. Excellent organisation and time management skills and ability to plan and organise short term activities.
6. Ability to assign tasks to others and be responsible for ensuring work is completed to the required timescales and standards.
7. Excellent oral, communication and interpersonal skills.
8. Excellent team working skills.
9. Responsive to change and adaptable to new challenges.
10. Demonstrates attention to detail and works to exceptional levels of accuracy whilst under pressure.
11. Willingness to work beyond normal working hours occasionally, when and as required.

DESIRABLE CRITERIA:

1. PhD with significant data collection and analysis.
2. Experience with service provision in an outward facing setting.
3. Demonstrate Proficiency with perl, python, bash and/or equivalent languages
4. Experience in using data servers/compute clusters.
5. Experience of working with Nova seq Illumina Platforms
6. Experience in data management and use of a laboratory information management system (LIMS).
7. Experience in analysis of large sequencing datasets.
8. Experience of working with BaseSpace.
9. Evidence of experience in disseminating research findings to non-academic audiences (e.g. writing of reports).