Job Profile
Job Description

Queen Mary
University of London

Job Details

Job Title:	**Tissue Bank Data Scientist (Breast Cancer Now)**
School/Dept/Institute & Centre:	School of Medicine and Dentistry/Barts Cancer Institute/Director's Office
Reports to:	Tissue Bank Principal Investigator (Breast Cancer Now)
Grade: 4	**Full Time**
Appointment period:	12 months
Current Location:	Charterhouse Square

Job Context

The Barts Cancer Institute (BCI) is a Cancer Research UK Centre of Excellence whose work aims to transform the lives of those with and at risk of cancer through innovative research in the laboratory, in patients and in populations. BCI is internationally renowned in many areas of cancer research and it combines ground-breaking basic research with the expertise of clinicians and clinician scientists from the Centre for Experimental Cancer Medicine and the Barts NHS Trust to achieve improvements in cancer patient care. BCI is also a partner in the CRUK City of London Major Centre (together with UCL, Kings and the Francis Crick Institute) which is a Centre of Excellence in Biotherapeutics. BCI is committed in supporting and developing future cancer researchers through its extensive postgraduate training. It is one of six institutes within The School of Medicine and Dentistry (SMD).

The Breast Cancer Now Tissue Bank is the UK's largest unique collection of high-quality breast tissue, breast cells and blood samples from breast cancer patients. The Operational Centre is hosted at the Barts Cancer Institute.

Job Purpose

The post holder is required to:
- design, develop and maintain an IT infrastructure for the maintenance of a sample repository from the lead Operational Centre (OC) of the Breast Cancer Now Tissue Bank (BCNTB);
- create links between local and central IT systems;
- maintain and enhance BCNTB IT Sample Finder tool to evolve with researcher requirements, integrate and create links between BCNTB IT samples and analytics from data returned;
- BCNTB Bioinformatics website design and maintenance;
- plan and deliver data management initiatives to address retrospective and prospective data for legacy cohorts;
- work as part of the BCNTB team, being mutually supportive and covering duties as necessary during colleagues' absences and at times of additional pressure, as directed.

Main Duties & Responsibilities

- To design, develop and maintain a MySQL-based database for the lead OC to allow for clinical and histopathological data to be uploaded and queried by data collection officers and designated individuals. This includes the generation of automated monthly reports of clinical characteristics and completeness of data.
- To generate links between the OC database(s) and the central BCNTB IT infrastructure.
- To maintain and evolve the current Sample Finder (web-based) to enable BCNTB researchers to query clinical, histopathological and molecular information available from BCNTB samples/data returned and perform specimen requests. Working knowledge with MySQL, R, PHP, Javascript in Linux platform is required.
- Plan and deliver data management initiatives to address retrospective and prospective data for legacy BCN Tissue Bank cohorts.

Main Duties & Responsibilities

- Liaise with IT and data teams within BCI and BCN Tissue Bank collaborating sites to improve and develop BCN Tissue Bank data informatics systems.
- Provide BCN Tissue Bank staff cross all sites with training, user guides and support to ensure all tissue bank staff can use all software effectively in line with Data Models.
- Perform software audits to ensure BCN Tissue Bank systems are compliant with data protection and HTA regulations.
- To be responsible for identifying and communicating potential risks, issues and roadblocks to the BCN Management team and various stakeholders in a timely manner.
- Ensure that systems are maintained in accordance with day-to-day operational requirements
- Maintain confidentiality in line with the provisions of the General Data Protection Regulation (GDPR).
- In the event of a statutory inspection, or audit, assist the BCN Tissue Bank Operations Manager and other staff members of the BCN Tissue Bank in preparing appropriate documentation and making necessary arrangements for the inspection in conjunction with the relevant departments.
- Work flexibly according to the needs of the Tissue Bank.
- Perform administrative and/or support tasks, to contribute to the smooth operation of tissue banks.
- Participate in the College Appraisal Scheme (QMPAS) and demonstrate a commitment to continuing professional development.
- Prioritise own assigned workload to ensure deadlines are met using skill and judgement with reference to regulations and standards under direction of BCI Tissue Bank management team.
- Ensure that they are fully aware of and comply with the HTA licence, College/Trust policies and procedures in relation to confidentiality, health and safety at work, and all local safety rules regarding fire, chemical, radioisotope and gene manipulation hazards.

Other:

- Ensure that all activities are undertaken according to HTA, Trust and College protocols.
- The postholder must at all times carry out their responsibilities with due regard to the College's Equal Opportunities policy.

The above list of responsibilities is not exhaustive and the jobholder may be required to undertake other duties commensurate with the level of the role, as reasonable requested by their line manager.

This job description sets out the duties of the post at the time it was drawn up. Such duties may vary from time to time without changing the general character of the duties or level of the responsibility entailed. Such variations are a common occurrence and cannot in themselves justify a reconsideration of the grading of the post.

Job Profile
Person Specification

This table lists the essential and desirable requirements needed in order to perform the job effectively. Candidates will be shortlisted based on the extent to which they meet these requirements.

	Requirements	Essential / Desirable
Qualifications	Educated to degree level or equivalent	E
	Post graduate qualification / Relevant Experience	D
Knowledge, Skills and Experience	Proficient in Unix/Linux environment	E
	Proficient in SQL querying and database development	E
	Proficient in R programming	E
	Sound knowledge in web application development scripting language (PHP, Javascript)	E
	Familiar with clinical terminology and classifications such as SNOMED-CT, ICD and HPO	D
	Experience with biological databases	D
	Experience with managing and integrating large datasets	D
	Experience in the data management, handling, organisation and use of structured and un-structured data	D
	Familiar with Human Tissue Act, Principles of Good Clinical Practice, General Data Protection Regulation and research governance framework legislation	D
	Strong organisational skills and attention to detail	E
	Able to follow written and oral instructions	E
	Able to organise own workload and respond to changing priorities	E
	Knowledge of clinical database application concepts and design	E
	Able to work both independently and as a supportive member of a team	E
	Excellent written and verbal communication	E
	Experience of writing reports	D
	Experience of conducting data audits	D
Attitude and Disposition	Friendly, positive and professional disposition to establish and maintain effective working relationship with others	E
	Self-motivated and hard working	E
	Able to cope under pressure and adhere to strict deadlines	E
Other	Willing to work on duties appropriate to the post	E

E – Essential: Requirements without which the job could not be done.
D – Desirable: Requirements that would enable the candidate to perform the job well.