

Job Details	
Job Title:	Tissue Bank Data Scientist - Health Informatics (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:	3 years
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 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 will:
- lead on development of health informatics system of the Breast Cancer Now operational centre and support Breast Cancer Now Tissue Bank informatics staff at collaborating sites;
 - liaise with NHS Trusts and Clinical Commissioning Groups to develop methods to access and exchange clinical data from primary and secondary care sources to the BCN Tissue Bank. Duties include linking electronic health record (EHR) data to BCN Tissue Bank sample data, data cleansing, formatting and transfer to BCN Tissue Bank systems, data integration with BCN Tissue Bank IT infrastructure.
 - plan and deliver data management initiatives to address retrospective and prospective data for legacy cohorts;
 - work as part of the BCN Tissue Bank team, being mutually supportive and covering duties as necessary during colleagues' absences and at times of additional pressure, as directed.

Main Duties & Responsibilities

- Link EHR data to BCN Tissue Bank sample data across all sites
- Cleanse, format and transfer EHR data to BCN Tissue Bank systems
- Integrate data into BCN Tissue Bank IT infrastructure
- Conduct bespoke statistical analyses
- Develop bespoke machine learning applications for predictive analytics
- Plan and deliver data management initiatives to address retrospective and prospective data for legacy BCN Tissue Bank cohorts
- Liaise with NHS institutions (local NHS trust data warehouses and NHS Digital) to facilitate data access and exchange
- Liaise with IT and data teams within BCI and BCN Tissue Bank collaborating sites to improve and develop BCN Tissue Bank data informatics systems

Main Duties & Responsibilities

- 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 in data science or the related field	E
Knowledge, Skills and Experience	Extensive experience in clinical data management within an NHS or health research setting	E
	Solid understanding and supporting of clinical terminology and classifications such as SNOMED CT, ICD and HPO	E
	Experience of delivering data integration and management solutions	E
	Experience in the data management, handling, organisation and use of structured and un-structured data	E
	Experience of conducting data audits	E
	Proficient in statistical analyses	D
	Experience with developing machine learning tools	D
	Familiarity with Human Tissue Act, Principles of Good Clinical Practice, General Data Protection Regulation and research governance framework legislation	E
	Strong organisational skills and attention to detail	E
	Ability to follow written and oral instructions	E
	Ability to organise own workload and respond to changing priorities	E
	Knowledge of clinical database application concepts and design	E
	Ability 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	E
	Friendly, positive and professional disposition to establish and maintain effective working relationship with others	E
Attitude and Disposition	Self-motivated and hard working	E
	Flexible, initiative and adaptability	E
	Willingness to work on different sites	E

Job Profile Person Specification

Requirements		Essential / Desirable
Other Circumstances		

E – Essential: Requirements without which the job could not be done.

D – Desirable: Requirements that would enable the candidate to perform the job well.