#### Form JE 5



**JOB DESCRIPTION**

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| 1. JOB IDENTIFICATION |
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| Job Title: Specialist Biomedical Scientist Point of care band 6 |  |
| Responsible to: Senior specialist biomedical scientist point of care (POC) and /or Associate Service Manager (ASM) POC  |  |
| Department(s): Diagnostics Laboratories |  |
| Directorate: Diagnostics |  |
| Operating Division: Access & Assurance |  |
| Job Reference: **SC06-2958(rev25)** |  |
| No of Job Holders: 2 |  |

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| 2. JOB PURPOSE |
| The post holder will work within the Quality Management System of the diagnostic laboratories to practice as a healthcare professional with HCPC registration within in a multi-professional team encompassing of diagnostic disciplines of ; haematology, Biochemistry, Virology and bacteriologyThe laboratory currently provides oversight and governance frame works for all point of care schemes within NHS Tayside in both hospital setting and community health and social care partnerships, spanning the geographical spread of NHS Tayside. This post is responsible for processing a broad range of point of care tests and comparing these with centralized laboratory solutions in order for verification of devices and suitability of the service with the aim to facilitate and informed clinical decision around the choice of point of care test and its placement within the patient pathway. You will regularly be required to provide specialist advice to clinicians and panels around point of care frameworks and governance.Point of care should always be placed with the right test right time right result ethos to ensure that it is used confidently in patient management pathways. The post holder is required to carry out the scientific and analytical work of the Department in a competent, safe, efficient and effective manner in order to provide quality assured service to clinical colleagues. He/she may be required to provide specialist services such as audit, training and risk management in support of the Quality Management System of the Department.He/she may be required to provide supervision and mentoring to colleagues at all levels and to more junior staff. He/she will contribute to the continuing development of practice of Diagnostic Laboratories  |
| 3. ORGANISATIONAL POSITION |
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|  Diagnostics Labs ExecutiveClinical Laboratory ManagerDiagnosticsAccessAssociate Medical &Associate DirectorDiscipline Specific Clinical Leads / Laboratory DirectorsConsultant Clinical ScientistPrincipal Clinical ScientistSenior Clinical ScientistsTrainee Clinical ScientistsDiagnosticsCare Group ManagerDiagnostics Labs**Lead Quality Manager**Deputy Quality ManagerQuality Management TeamPhlebotomy ManagerPhlebotomy Supervisor& phlebotomistsDiagnostics Labs**Health & Safety Officer****Pre- Analytical**Services ManagerPre-Analytical Service Manager, Reception staffMedical Laboratory AssistantsBlood Sciences**Corelab**Assoc Service ManagerSenior Biomedical ScientistsBlood Sciences**Biochemistry**Assoc Service ManagerBlood Sciences **Hematology**Assoc Service ManagerSpecialist Biomedical Scientists &Biomedical ScientistsBlood Sciences**Immunology**Assoc Service ManagerAssociate PractitionersBlood Sciences IT Manager& IT Support OfficerBlood Sciences**SBSL**Assoc Service ManagerMedical Laboratory AssistantsMicrobiology**Bacteriology**Assoc Service ManagerA&C TeamCovid & Hotlab TeamsMicrobiology**Virology**Assoc Service Manager**POCT Specialist Biomedical scientist THIS POST**Diagnostics Labs**POCT**Assoc Service ManagerTraining TeamDiagnostics Labs**Training Manager** |

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| 4. ROLE OF DEPARTMENT  |
| NHS Tayside Diagnostics Laboratories provide a comprehensive analytical, interpretative and clinical advisory service to primary and secondary care across NHS Tayside, North Fife and South Grampian. The department also collaborates in a range of research and development and clinical audit projects within Tayside, nationally and in association with third sector organisations and diagnostic companies. There is a considerable commitment to teaching across a diverse range of students, healthcare professionals and professional institutes.The Department is accredited to ISO 15189 standards, accredited separately as Blood Sciences and Microbiology. NHS Tayside Blood Sciences department is a United Kingdom Accreditation Service (UKAS) accredited medical laboratory No. 8681; and Microbiology No. 8610.The annual workload of the Department is in excess of 7 million tests, with workload rising by approximately 3-5% per annum, with a continually expanding repertoire. The total annual budget is over £20 million comprising of approximately £12 million staffing and £9 million reagents, consumables, equipment and services. The Department operates its services 24 hours per day, 365 days per year. Blood Sciences comprises of the following departments: Biochemistry, Haematology, Immunology, Bowel Screening, Point of Care Testing and Phlebotomy. The Blood Sciences laboratories receive over 10000 samples per day with a workforce of over 140 members of staff.Blood Sciences provides a 24/7 high quality, analytical, interpretive, and advisory diagnostic service, across two sites, with the main laboratory facility being at Ninewells Hospital in Dundee and a multi-disciplinary laboratory at Perth Royal Infirmary (PRI). The department is also a specialist referral centre for a range of tests, hosts the Scottish Bowel Screening Service, and provides Clinical Consultancy for Immunology across number of Scottish Health Boards.The multidisciplinary laboratory at PRI includes Biochemistry, Haematology and Blood Transfusion, which is regulated by the Medicines and Health Regulatory Agency (MHRA).Microbiology comprises of Bacteriology and Virology in Ninewells Hospital, including a multi-disciplinary Molecular Microbiology Diagnostics suite, providing a comprehensive analytical, interpretative and clinical advisory service. The Microbiology laboratories receive over 250,000 specimens per annum and employ over 100 staff. The Department acts as a source of expertise on control and management of infection, sterilisation and decontamination, antibiotic use and health and safety**.** Microbiology also provides a logistics service for the transportation of samples, pharmacy vaccines and chemotherapy drug deliveries across Tayside.The development and delivery of molecular assays for a number of microbial targets provides opportunities for rapid diagnosis in clinically relevant timeframes and permits detection of existing, new and emerging organisms of Public Health importance. These molecular assays are a new and expanding part of the Microbiology service provision. |
| 5. KEY RESULT AREAS (MAIN DUTIES) |
| The post holder is responsible as a Health Professions Council (HPC) registered Biomedical Scientist for providing a professional analytical service within the standards of competence and proficiency defined by the HCPC in support of the provision of a high standard of patient care. The post holder is required to take responsibility for his/her own work, under the overall management of a Senior Biomedical Scientist) and/or an Associate service manager (ASM) for point of care. The post holder is required to comply with all NHS Tayside and Departmental policies and procedures.**Scientific and Technical**The post holder will:Work within competence in all sections of the point of care department within diagnostic laboratories providing oversight and governance for point of care schemes throughout NHST including inpatient and community settings as appropriate to providing specialist skills within point of care that allow for verification, training competency audit and risk assessment of existing and new POC schemes within NHST. The post holder will acquire, update and refresh these specialist skills, as required and maintain up to date knowledge on new and emerging technology. The analytical and technical work will, include a variety of sample types from venous blood samples, buccal swabs, sweat analysis and finger prick samples from adult, children’s and acutely unwell patients. Comply with all relevant Standard Operating Procedures. The post holder will be required to participate in the production and review of Standard Operating Procedures and to propose changes and amendments within area of specialism.Work as a HPC registered practitioner in a managed environment and with a considerable degree of autonomy to take professional responsibility for his/her own workload to meet the requirements of the Department of point of care within diagnostic laboratoriesBe competent in the use of the specialized analytical systems and manual techniques deployed within the point of care Department. Competence includes acquiring and maintaining sufficient knowledge of the underlying, analytical and methodological principles to enable the post holder to carry out routine daily, weekly, monthly and ad hoc maintenance and first line troubleshooting. The post holder is also required to take appropriate remedial action and/or to report faults promptly through the line management structure, as appropriate. Maintain a theoretical knowledge and practical competency in all aspects of the pre-analytical phase of the analytical process and apply this knowledge and practical competency to appropriate pre-analytical procedures and to identifying and following up errors. Pre-analytical procedures include Specimen Reception process, specimen acceptance and rejection criteria, accurate entry of data onto the Laboratory Information Management System with attention to detail in ensuring correct patient and specimen identification and differentiation of urgent samples from routine samples. This requires high level concentration which may be over a prolonged period. Maintain theoretical knowledge and practical competency in all aspects of the post bringing specialist knowledge to troubleshoot point of care analyses and provide training and support for point of care users within NHST. Ensuring that all results generated form a point of care device is of a quality nature and can be used confidently in patient management pathways. Carrying out of any appropriate follow up action as required. Perform suitable and agreed quality control and quality assurance procedures at specified intervals and on an ad hoc basis. The post holder will be required to understand and interpret the data in order to validate the procedures as being operating within agreed acceptable limits and to take appropriate remedial action, when required. Acquire and maintain competence in the use of the IT systems deployed by the Department to enable the post holder to carry out the analytical work of the Department and to report results in accordance with the Standard Operating Procedures of the Department. The post holder will require having sufficient understanding of the architecture of the IT systems to use them appropriately and with regard to ensuring the timely production of high quality, accurate and appropriate reports.Evaluate and interpret results and result flags and error messages in order to technically validate analytical results as being valid to report and be competent in identifying incorrect or invalid results and to take appropriate remedial action. These actions will include evaluation of the functioning of the analytical system, consideration of the quality and/or suitability of the sample, performing repeat analysis in appropriate, consideration of the use of an alternative methodology. Assess right time right tests right result ethos of point of care. ensuring results / devices are appropriately placed for economic and effective gains for the trust and the patientParticipate in the delivery of Point of Care services across NHST including working single handily at clinics which are supported by the Department to provide a specialist, Point of Care analytical and reporting service e.g. Sweat testing Be responsible for contributing to the safe use of expensive and highly complex equipment. Assist in the management of point of care users with training competency and recertificationThe post holder may be required to participate in current and future weekend service or late shift. Will require loan working out in wards and community environments as required to deliver training / troubleshoot devices. Often requiring flexing to uncontrolled and changing priorities. The Department undertakes Research and Development work, and the post holder will be required to contribute their knowledge, skills and experience to this work. **Management**Specialist Biomedical Scientists will be managed by a Senior Biomedical Scientist) and/or point of care ASM but will be responsible for his/her own decisions and actions in meeting the Standards of Conduct of NHS Tayside and of the Health Professions Council.The post holder:Will be required to participate in supporting the training and development of staff. He/she may be required to mentor and supervise Trainee Biomedical Scientists, Biomedical Scientists, Support staff and other grades of staff within NHST both in hospital and community settings supporting the training and development of Clinical areas where the point of care device resides. Will be required to participate in the procurement, evaluation and introduction of new techniques and equipment, as required.Will be required to participate in audit activity.Will be required to participate in Incident Reporting and Investigation. Will be required to assist in the management of stocks of reagents and consumable items by regular monitoring of stock levels, by identifying requirements and reporting deficiencies of stocks to senior staff and by ensuring stock rotation. Will be required to understand the cross charging to areas for point of care consumables, batch acceptance and oversight.**Professional**The post holder:Will conform to Standards of Conduct defined by the Health Professions Council and NHS Tayside. Will maintain up to date scientific and technical knowledge relevant to his/her scope of practice.Will maintain registration as a Biomedical Scientist with the Health Professions Council by demonstrating an appropriate commitment to Continuing Professional Development and by maintaining appropriate records of development activities to satisfy HPC requirements and those of external accrediting agencies. Will participate in Annual Joint Staff and Personal Development Review and will highlight through the review process any training requirements, deficiencies in knowledge, experience or competency which require to be addressed.Will maintain patient confidentiality at all times. Will provide advice and information to service users within the scope of practice of a Biomedical Scientist Will priorities and manage workload to achieve the required turnaround times for the relevant Service delivery.Will make appropriate use of time to maintain professional knowledge, expertise and skills within his/her scope of practice to facilitate personal and professional development in order to optimise his/her contribution to service delivery.**Health and Safety**The post holder:Will act in a responsible manner at all times to safeguard the health, safety and wellbeing of the post holder and his/her colleagues including maintaining a safe, clean and tidy workplace and disposing of waste safely and in accordance with Departmental policies and procedures and Risk Management guidance.Will comply with all relevant NHS Tayside and Departmental Health and Safety requirements, Policies and Procedures.Will, in the course of his/her daily duties, be required to work with specimens containing “high risk” infective agents such as HIV and Hepatitis B and may be required to work with agents such as solvents, acids, alkalis, toxins, carcinogens and medical gases. He/she will be expected to recognise and to self manage these risks in accordance with NHS Tayside and Departmental policies and procedures and to utilize the appropriate level of containment. The post holder will be responsible for the removal and appropriate decontamination of any spillage of reagents and body fluids e.g. urine from known IV drug abusersMay be required to work as a lone worker when delivering training / support Point of Care devices and this maybe out with normal hours of work to accommodate the varying shift patters both from inpatient and community point of care settingsWill assist, in the preparation of Risk Assessments, Incident Reports and may be required to support Root Cause Analysis.**Others**The post holder will undertake other duties commensurate with the grade as agreed with point of care ASM. These may include carrying out appropriate delegated duties in areas such as: * Supporting point of care area where the device resides by training users and maintaining equipment and supporting users in accordance with standard procedures.
* Health and Safety to include assisting in maintaining General Risk Assessments, COSHH Assessments, DSE Assessments and performing regular Health and Safety checks.
* Audit to include assisting the Quality Manager with delivery of the area-wide audit calendar by performing and reporting vertical, horizontal and examination and other quality control audits.
* Training to include liaising with the Department Training Officer / areas and staff leads where the point of care device resides to arrange multidisciplinary CPD events and recording attendance.

Applying knowledge skills and experience where the post holder has a particular interest or has been able through circumstance to acquire a more in-depth knowledge and experience than his/her peer group. To support NHS Tayside values of quality, teamwork, care and compassion, dignity and respect, and openness, honesty and responsibility through the application of appropriate behaviors and attitudes*.***Responsibility for Records Management** All records created in the course of the business of NHS Tayside are corporate records and are public records under the terms of the Public Records (Scotland) Act 2011. This includes email messages and other electronic records. It is your responsibility to ensure that you keep appropriate records of your work in NHS Tayside and manage those records in keeping with the NHS Tayside Records Management Policy and with any guidance produced by NHS Tayside specific to your employment. |
| 6. SYSTEM, EQUIPMENT AND MACHINERY |
| The post holder will have competencies or be trained in the use of the following specialized complex equipment. The post holder will be responsible for recording data, minor error logs etc and for reporting incidents as part of the quality management system. He/she will also contribute to ensuring that the analyzers are adequately maintained and that safe systems of work are maintained.* Networked cross-discipline Laboratory Information Management System software, LIMS.
* Other software utilized in the processing of specimens and production of results to the electronic patient record including Point of Care middleware’s and SCI stores and connectivity / interaction of these systems
* Proprietary software packages such as Microsoft Office, Excel, Q Pulse and e-mail.

Point of care analysers to include:* Connected glucose and ketone meters within inpatient areas, non connected glucose and ketone meters in community areas, INR community testing, Blood gas inpatient wards, EPOC (handheld blood gas) respiratory service, ACT analysis, HemoCue determination, ROTEM and PLGF markers. Some pharma- genetics testing platforms, respiratory virology analysis.

The systems and equipment will be subject to update and replacement at indeterminate intervals.* A range of manual techniques
* The post holder will require to be proficient and have update training in the troubleshooting of basic problems and errors associated with the use of all equipment.
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| 7. ASSIGNMENT AND REVIEW OF WORK  |
| The post holder will follow the line manger structure reporting to the Senior specialist biomedical scientist in POC and / or the point of care ASM  |
| **8. DECISIONS AND JUDGEMENTS** |
| The post holder:* Works within own scope of practice, following all relevant NHS Tayside and Departmental procedures and policies on which he/she may be required to comment.
* Work will be reviewed by the Senior Biomedical Scientists), Point of care associate service manager and competency levels will be agreed with the post holder on a continuous basis.
* Reports through the line management structure to the Senior Biomedical Scientists Point of care associate service manager (as appropriate.
* Works within a managed environment without direct supervision and with a considerable degree of autonomy to take professional responsibility for his/her own workload to meet the requirements of the Department of point of care within diagnostic laboratories Duties may be assigned by the Senior Biomedical Scientists and/ or Point of care associate service manager
* Follows Standard Operating Procedures (SOPs) and may update Standard Operating Procedures, as required and following Departmental policy.
* Deals with technical enquiries from point of care users, trainee Biomedical Scientists, newly qualified staff and support staff.
* Assesses complex diagnostic test results for accuracy and determines further actions required, as laid down in Standard Operating Procedures. For example, removal of a device which may result in contingency planning
* Accepts or rejects samples and tests requested based on protocols and on professional judgment to include interpretation of quality control data, available sample and patient identification and sample integrity and suitability. He/she undertakes further tests/actions when required, with referral to more senior staff as appropriate.
* May be required to assess the suitability of requested tests for given clinical information and to select appropriate tests within time and workload parameters.
* Operates independently in the Department but will refer unexplained or unusual results or complex situations to his/her line manager or another appropriate member of staff, especially if confronted with a situation out of normal working hours that is beyond their level of training.
* Uses own judgment to solve problems in day-to-day work such as identifying and dealing appropriately with spurious or art factual patient results, troubleshooting of methodological and analyser problems, following up missing samples or results and dealing with telephone enquiries.
* Assesses the fitness for purpose of reagents and test materials in use.
* May contribute views on the selection and evaluation of new techniques and service developments including being involved in the evaluation of new instrumentation.
* May be required to input into consideration on the progress of Medical Laboratory Assistants and Trainee Biomedical Scientists.
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| 9 MOST CHALLENGING/DIFFICULT PARTS OF THE JOB* Maintaining a high level of accuracy, precision and safety with respect to point of are scheme throughout NHST.
* Maintaining concentration and accuracy for long periods of time, throughout the working day.
* Maintaining quality standards.
* Performing duties in a cross-discipline environment.
* Continuing professional development.
* Prioritization and ability to flex to changing priorities which will directly affect patient care
* Dealing with difficult users or ward areas where ether are issue with a point of care scheme
* Working autonomously, particularly at offsite training / supporting point of care schemes that can be out with normal working hours
* Maintaining up to date knowledge base through CPD.
* May be required to deputize for more senior members of staff.
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| **10. COMMUNICATIONS AND RELATIONSHIPS** |
| The post holder:* Is accountable to the senior Biomedical Scientist in point of care through the Line Management structure.
* Will work as a self-directing practitioner within the Line Management structures in all sections of the point of care Department, which encompasses all disciplines of the diagnostic laboratories.
* Will contribute to maintaining and developing the Service through communicating and discussing complex scientific, technical and medical related information internally with associate service managers, Clinical Scientist, senior Biomedical Scientist, Biomedical Scientists, Medical Laboratory Assistants, Consultant Medical staff, Junior Medical staff and Admin and Clerical staff.
* Will facilitate and contribute to effective communication within the Department by participating in appropriate Departmental meetings and maintaining awareness of relevant information through accessing minutes of Departmental meetings, NHS Tayside Intranet, e-mail and other forms of electronic and non electronic communication.
* Will communicate with the Training Officer and senior Biomedical Scientist in point of care in relationship to competence, personal development plans and the knowledge and skills framework.
* Will co-operate in internal and external clinical and laboratory audit programs.
* Will co-operate in cross-discipline areas within point of care service within diagnostic laboratories.
* Will receive information from senior laboratory staff, clinicians and other users. The content of the
* information will vary from routine to highly complex requiring interpretation, analysis and further action.
* Will be required to interact with clinicians in highly stressed and/or confrontational situations and to relay information to clinicians, point of care users where empathy, re-assurance and accurate communication are essential and where lack of understanding, contention and hostility can be encountered, e.g., results of critical and/or urgent analysis, neonatal work and paediatric sweat electrolyte collection.
* Will notify appropriate staff of clinically significant deviation from the point of care service which will result to changes in patient flow as laid down in Standard Operating Procedures.
* Will deal with enquiries from all sources, providing explanations and comments and recommending further actions, as required and within competence. Using professional judgement, when required the post holder will direct enquiries to senior Biomedical Scientist staff, Clinical Biochemists and Medical staff.
* Will support and assist in the training of all point of care users, Trainee Biomedical Scientists, Biomedical Scientists, Trainee Clinical Biochemists, Medical Laboratory Assistants and other support staff.
* Will communicate as required with other staff groups external to the Department including all grades of ward and GP based staff, medical staff, nursing staff, clerical staff, porters, estates staff and drivers.
* Will communicate non-conformities identified or system malfunctions to senior Biomedical Scientist staff and/or the Departmental Quality Manager, as appropriate.
* Will communicate with the professional body the Institute of Biomedical Science and the Health Professions Council for areas of professional conduct and CPD.
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| **11. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB** |
| **Physical**:* Requires to posess highly developed physical skills and high-level coordination and manual dexterity, where accuracy is paramount
* Requires manual manipulation of very small volumes of sample, particularly from neonates
* Requires accurate hand - eye coordination in carrying out a variety of scientific techniques.
* Requires good keyboard skills
* May require standing for extended periods of time [up to 2 hours continuously]
* May require sitting for extended period of time [up to 2 hours continuously]
* Requires frequent use of keyboard [up to 2 hours continuously]
* Requires small items of stock to be moved weighing up to 10kg for manual movement and moving larger weights by trolley
* Some situations demand Lone Working with no immediate support from colleagues (e.g. at clinics and out of normal hours).

**Mental**:* Continual requirement to maintain concentration throughout the working day with sustained attention to detail.
* High level of eye and hand co-ordination required for manual testing.
* Work patterns can be unpredictable and subject to interruptions.
* Multi-tasking and prioritization of work in a busy and stressful environment.
* Decision making on the basis of results of analyses and on available clinical information, supporting point of care devices to ensure quality results and knowing when these have been compromised and with drawing service while providing alternative Arrangements. Frequent interruptions from phone calls/ staff () and technical queries.
* Occasionally dealing with difficult patients and users in stressful situations, e.g., at Diabetic Clinics. In ward where the point of care device has broken, or user cannot access, and urgent patient required.

**Emotional**:* There is daily exposure to patient information containing explicit diagnoses which may include adverse prognoses, including advanced malignant disease.
* There is occasional exposure to very ill neonates and young children when carrying out procedures such as sweat testing in the out-patient environment.
* Working to ensure quality remains key even if users are stressed and upset in the knowledge that inaccurate or delayed results may directly and adversely affect patient management.
* Working in a very stressful environment when the analytical systems or IT systems fail.

**Environmental**:* Handling of and exposure to samples such as blood, urine, faeces and other body fluids, many of which may be from patients infected with HIV, Hepatitis B and Hepatitis C, on a daily basis.
* Handling of and exposure to potentially hazardous laboratory chemicals.
* Frequent use of Display Screen Equipment
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| 12. KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB |
| **Induction Standards & Code of Conduct** Your performance must comply with the national “Mandatory Induction Standards for Healthcare Support Workers 2009” and with the Code of Conduct for Healthcare Support Workers * BSc Honours degree in Biomedical Sciences [or alternative BSc Honours degree with appropriate supplementary qualifications acceptable to the HPC] and IBMS Certificate in General Competence
* IBMS Post Graduate Specialist portfolio or equivalent experience as a HPC registered Biomedical Scientist
* Current registration with the Health Professionals Council.
* Evidence of Continuing Professional Development to Health Professions Council requirements.
* Knowledge and skills framework development portfolio.
* Specialist theoretical knowledge and understanding of a wide range of clinical conditions and non-clinical factors and their effect on analytical performance and practical experience in analytical biochemistry, haematology, virology or bacteriology (disciplines of the diagnostic laboratories) and its clinical application in laboratory medicine.
* Training and proven competence in the use of automated analyzers, semi-automated analyzers and manual techniques including demonstrated competence in sample handling.
* Knowledge, skills and experience in the application of appropriate Quality Management procedures including quality control, assessment and assurance techniques, audit, risk management and incident reporting.
* Knowledge, skills and experience in the application of appropriate IT systems.
* Knowledge of Health and Safety as relevant to working in a healthcare laboratory environment and proven skills and experience in applying this knowledge.
* The post holder will require being capable of practicing as a lone worker for extended periods of time of up to 12 hours with only remote support and advice available.
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| **13. JOB DESCRIPTION AGREEMENT** |
| A separate job description will need to be signed off by each job holder to whom the job description applies.Job Holder’s Signature:Head of Department Signature: **(I confirm this Job Description accurately reflects the duties and** **responsibilities of the post holder and does not impact upon any other** **post holders role)**  | Date:Date: |