Directorate of Pathology
Laboratory Medicine Service
Job Description Band 6

Job Title: Specialist Biomedical Scientist

Division: DT&C

Directorate: Pathology

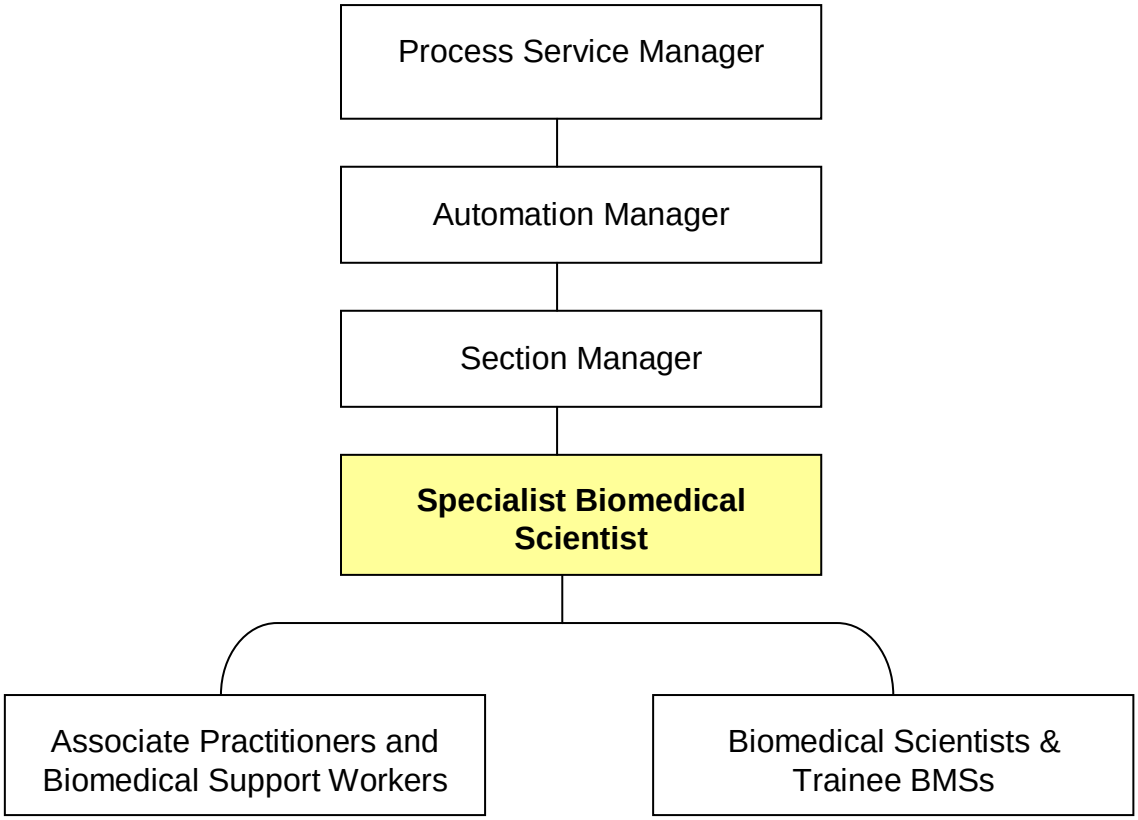
Responsible to: Section Manager

Accountable to: Laboratory Medicine Service Manager

Responsible for supervising: Biomedical Scientists, Trainee BMS, Associate Practitioners and Biomedical Support Workers

Location: High capacity laboratory at Morriston and the essential service laboratories at Princess of Wales Hospital and Singleton hospitals.

Line Management Chart



Job Purpose:

The post holder will practice as an experienced specialist HPC registered biomedical scientist to provide a continuous and comprehensive Laboratory Medicine service comprising of Haematology, Laboratory Medicine and Blood Transfusion, as an aid to effective diagnosis and treatment. They will certify analytical and technical validity of investigations, liaising with clinical and Laboratory Medicine staff to ensure diagnostically abnormal results are acted upon urgently. The post holder will also be expected to work on rotation to the various routine and specialised sections across all three laboratory sites, be capable of working unaccompanied and be accountable for the quality of work produced. The post holder will maintain personal and professional development and competency to meet the changing demands of the job and participate in appropriate training activities and encourage and support staff development and training.

Technical and Scientific Duties.

1. To work on rotation within sections of the high capacity Laboratory Medicine laboratory and the essential service laboratories.
    - Specimen reception and pre-analysis processing
    - Automation
    - Blood Transfusion
    - Special Analytical Techniques
    - Point of Care

2. To undertake the processing of patient samples referred to the laboratory for analysis and all peripheral tasks necessary for that purpose, within approved accreditation standards. Sample processing includes both automated and semi automated process and involves validation work of an interpretive nature in relation to laboratory aspects of the service.

3. To carry out routine preventative maintenance, troubleshooting and repair, keeping complex equipment in optimal condition and taking corrective action where necessary. This involves the use of highly developed physical skills where accuracy and fine adjustments to diagnostic equipment is essential.

4. To function with enhanced responsibility, working alone as required. To have the experience, skills, knowledge and tacit understanding to be able to operate and troubleshoot core laboratory instrumentation unaccompanied, out of hours and at weekends.

5. To participate in the development and when necessary, the implementation of department backup procedures in the event of technical failures e.g. laboratory information system, analysers, water purification system.

6. High levels of concentration are required to undertake technical and diagnostic procedures. Multi tasking will be a key component of the role and a broad portfolio of IT, technical, interpretative and diagnostic skills may need to be deployed in discharging a single facet of the role.

7. To prepare blood and its products for transfusion and to maintain adequate / safe levels of blood and blood products, to monitor the appropriateness of blood usage and to track the movement of blood. To notify members of the Trust's Emergency Blood Plan Action Committee any changes in the status of blood supply / stocks as indicated by the Welsh Blood Service.

8. Attend various out-patient clinics/wards in order to take blood samples from patient's e.g. capillary blood INR testing in warfarin clinics or the bed-side preparation of bone marrow slides and aliquoting material to send away for investigations such as cytogenetic testing. This may involve occasional exposure to distressing or emotional circumstances.

Responsibility for resources

1. Monitor, receive and appropriately store consumables and reagents to avoid critical stock levels being reached, reporting deficiencies in accordance with departmental protocols. This ensures that the high level of service provided by the Laboratory Medicine service continues uninterrupted.

2. May be required to complete internal supply requisition orders.

3. To manage resources economically, paying particular attention to stock rotation.

4. To be fully conversant with Health Board policy on Waste management e.g. disposal of clinical waste and disposal of chemical effluent.

Communication

1. To deal with telephone calls and enquiries form partner organisations, other enquiries, individual professionals, carers and the general public.

2. To understand the need for effective communication throughout the care of the patient, client or user. To be able to demonstrate effective and appropriate skills in communicating information, advice, instruction and professional opinion to colleagues, patients, clients, users, their relatives and carers.

3. To communicate effectively and assertively with other professionals within the department and the Health Board as a whole

4. To directly communicate with patients and relatives involved with anticoagulant outpatient clinics and in the arrangement and performance of specialised tests e.g. capillary INR testing or blood volumes or platelets function tests etc.

Analytical, judgement and interpretive duties.

1. To prioritise investigations appropriate to clinical need and be able to reschedule work plans to accommodate acute requests, taking into account instrument capability and potential malfunction. This may include, where appropriate, delegation of certain tasks to streamline workflow through the department.

2. To undertake specialised and developmental work, preparing, storing and analysing samples suitably for the purposes of drug and clinical trials and/or research and development.

3. To participate in the assessment and evaluation of new diagnostics/biomedical instrumentation prior to routine use.

4. To be able to recognise analytical errors and atypical test results. Taking corrective action to prevent inappropriate medical intervention. For example, a falsely high potassium level, resulting in inappropriate treatment of the patient.

5. To be able to recognise non-analytical interferences, such as sample collection, preservation and storage errors and take appropriate corrective action. For example, some anti-coagulants can produce grossly erroneous results if used inappropriately.

6. To identify any specimens and/or requests that may cause problems, such as health & safety, sample quality and non-compliance with minimum acceptance criteria e.g. the minimum requirement for patient information.

7. To be able to recognise and interpret test results that need to be communicated to clinicians, in particular unexpectedly abnormal results that may need urgent clinical action.

Service administration and liaison.

1. To recognise complex situations outside the remit of Standard Operating Procedures and, if necessary, liaise with a section manager or other senior member of staff for resolution.

2. Monitoring workflow and outstanding work, initiating rectifying measures and alerting Section managers of any possible problems.

3. To ensure that appropriate Clinical staff are notified of critical results immediately.

4. When working alone, be able to advise clinical staff when required of the appropriate use of tests and their interpretation e.g. correct timing of samples in suspected paracetamol overdose.

5. To be able to, when working alone, take responsibility for organising staff involved in transporting specimens in order to optimise urgent response times i.e. to be the professional leader of a situation.

6. To be fully conversant with Health Board and Departmental Major Incident procedures

7. During normal working hours individuals may be required to arrange transport of samples to alternative laboratories, bringing into use backup equipment and may be required to liaise with engineering support staff after consultation with Section Managers

8. Acquire an understanding of procedures relating to specimen reception, IT and general office to enable assistance to be offered when required.

Quality

1. To apply departmental Quality Control (QC) procedures and investigate QC problems.

2. To check the validity and reliability of analytical processes, maintaining and monitoring performance within specification by internal and external quality assessment.

3. To ensure completion and validation of routine and specialist analyses to a high specification.

4. When analysing samples, to have thorough knowledge of that instrument's current Quality Control status and trends.

5. Participate in the development, and maintenance of standard operational procedures (SOPs). May also be required to assess SOP usability including communication of deficiencies to document owners.

6. Participate in routine vertical and horizontal audits of Laboratory process quality and produce specialist audit reports using appropriate software packages. These reports will relate to Clinical utility and analytical quality as directed.

7. To maintain an up to date knowledge and awareness of the Department's External Quality Assurance performance and audit conclusions.

8. To read and understand all quality management communications relating to service policies and procedures

9. To comply with standards relating to Laboratory Medicine practice so that required accreditation is maintained.

10. To comply with all departmental policies, protocols and standard operating procedures, using appropriate judgement commensurate with knowledge and experience, to provide the diagnostic service of the Department; testing of clinical samples will be conducted in such a way as to produce and issue accurate reports in a timely fashion.

11. To assist in implementing strategies needed to support external Quality Initiatives e.g. MHRA and CPA.

IT Skills

1. To ensure data integrity when entering results and reports into computer held patient records.

2. To be fully conversant with all operator modules within the Laboratory Information System (LIS)

3. To have good operating knowledge of system control and monitoring software on all main Laboratory instruments.

4. To possess a good working knowledge of the departmental interfacing software and its configuration to troubleshooting level.

5. To liaise with intra and extra departmental staff in resolving any computer interfacing or instrument difficulties.

6. To be fully conversant with the computer based departmental quality management system for accessing controlled documentation and standard operating procedures and be able to advise document authors where revisions may be required.

7. To understand that access to information must be on a need to know basis for the purpose of using this information in the direct discharge of duties. To comply at all times with the standards outlined by the Data Protection Act, Freedom of Information Act and Caldicott Committee's principles on information handling.

8. To possess a good working knowledge of the Microsoft software packages required to perform routine duties within the laboratory e.g. Word, Powerpoint and Excel. To use this software manipulate and present complex information.

Supervisory Duties

1. To supervise biomedical support staff, trainees, students, Associate Practitioners and Biomedical Scientists checking and validating their work where appropriate.

2. To deputise for the Section Manager as required.

Teaching and training responsibilities

1. To participate in training of, Biomedical Scientist, trainee Biomedical Scientists, Associate Practitioners and biomedical support staff

2. May be required to act as a mentor for qualified biomedical staff, as necessary.

3. To carry out technical cascade training for all levels of staff.

4. To participate in the delivery of presentations and tutorials for educational, training and audit purposes.

Personal training and development responsibilities

1. To acquire workplace based technical skills to monitored professional competency standards.

2. To participate in Continuing Professional Development (CPD) activities to satisfy Health and Care Professions Council (HCPC) requirements.

3. To develop key skills and update personal development plan in line with National Quality Standards and be able to personally identify training requirements through reflective practice. To participate in the individual performance review systems in accordance with Health Board guidelines.

4. Attend internal and external training and education courses and where required to do so, demonstrate that an agreed competency standard has been attained.

5. To acquire and maintain the skills to fulfil the responsibilities associated with working unaccompanied out of hours.

6. To develop and maintain communication skills to deal directly and effectively with medical and nursing staff, using empathy and persuasive skills to diffuse difficult situations.

Professional responsibilities

1. To be responsible for the maintenance of their Health Professions Council (HPC) registration by compliance with the professional code of conduct and standards of proficiency laid down by the HPC.

2. To comply with Health Board policies as appropriate to the job/grade. This includes compliance with all aspects of the Bro Morgannwg University Health Board's contract and conditions of employment, employee's code of conduct and standards of business conduct for staff. They must also comply with Bro Morgannwg University Health Board's Sickness/absence policies, Information Technology policies, Health and Safety policies and Security policies as well as those which are more general to the Health Board.

3. To practice within the legal and ethical boundaries of the profession. To be able to exercise a professional duty of care and to understand the professional and personal scope of their practice and be able to make referrals.

4. To be aware of the limits of their practice and when to seek advice. To be responsible for the effective self-management of workload and be able to practice accordingly. To understand and fulfill the obligation to maintain fitness to practice. To understand the need for, and demonstrates a willingness to participate in, career long self-directed learning.

5. To maintain confidentiality regarding information generated in regard to requests received whilst dealing courteously with requests from appropriate sources for results and other information pertaining to investigations carried out.

Code of Conduct and Accountability

1. You are expected to comply with relevant Health Board codes of conduct and accountability and the Codes of Conduct and professional guidelines as laid down by the Institute of Biomedical Science (IBMS) and the HPC.

2. To act in accordance with the Health Board's financial procedures.

3. To have a duty of care for all patients, relatives and visitors.

Health and Safety

1. In accordance with the Health and Safety at Work Act 1974 and other supplementary legislation, you are required to take reasonable care to avoid injury during the course of your work and co-operate with the Health Board and others in meeting statutory regulations. You are also required to attend statutory training as required to fulfil your duties.

2. To be responsible for their own health and safety and that of their colleagues, notifying the line manager if unsafe equipment or unsound practices are noticed,
   e.g. manual handling issues, faulty equipment etc. Staff are expected to undertake appropriate training to work safely at Containment level 2 following Departmental Health and Safety policies and protocols. Appropriate training must also be undertaken to understand and apply COSHH regulations, HSE, HSAC, ACDP and all other relevant UK health and safety legislature and EU health and safety Directives competently.

3. Exposure to hazardous materials such as chemicals with MELs and OESs, carcinogens and pathogens will frequently occur. Will be required to know the correct risk reduction procedures to include PPE, RPE and containment equipment.

4. To keep up to date with general Health and Safety issues and specific Health and Safety training.

5. To comply with Health Board safety instructions, policies and procedures and departmental procedures laid out in the Laboratory Medicine Safety Manual

6. To use in a proper safe manner the equipment and facilities provided.

7. To refrain from wilful misuse of or interference with, anything provided in the interest of health and safety and any action that might endanger yourself and others.

8. To report as soon as possible any hazards and defects to the section leader or laboratory manager.

9. To report as soon as possible accidents and untoward incidents and ensure that accident forms are completed.

10. To ensure departmental and Health Board security policies are adhered to at all times.

Confidentiality

Working with the Health Board you may gain knowledge of confidential matters, that may include personal and medical information about patients and staff. Such information must be considered strictly confidential and must not be discussed or disclosed. Failure to observe this confidentiality could lead to disciplinary action being taken against you.

Postscript:

This is not intended to be a comprehensive description of the duties of the post. The post holder may be required to undertake other duties commensurate with the level of responsibility and after discussion with the post holder.

The Health Board operates no smoking and no alcohol policies whilst on duty in the workplace.

Signed…….. Date……..

Print Name……

Manager's Signature…… Date…….

Print Name……

	ESSENTIAL	DESIRABLE	METHOD OF ASSESSMENT
QUALIFICATIONS	- BSc in Biomedical Science or equivalent - Registration with Health and Care Professionals Council (HCPC) - IBMS Specialist Diploma in Laboratory Medicine or Equivalent - Evidence of ongoing participation in compulsory CPD	- Membership of The Institute of Biomedical Science - MSc in Biomedical Science - BBTS Specialist Certificate in Transfusion Science Practice	- Application Form - Certificate Check - HPC on-line registration check - HPC audit
EXPERIENCE	- Satisfactory completion of Departmental Training Program - Post registration experience to develop a wide understanding and practice of Laboratory Medicine techniques. - Some experience of complex specialist laboratory techniques.	- Leadership skills - Multidisciplinary work experience	- Application Form - Interview - References - Internal Laboratory assessment of competency
SKILLS	- Proven ability to work unaccompanied. - Ability to prioritise and organise workload. - Ability to troubleshoot. - Manual dexterity. - Effective communication skills. Good data interpretation, presentation and audit skills - Good spoken & written English. - Good document and report preparation skills - Ability to train and supervise - To be a mentor for entry grade BMS.	- First aid - Welsh language skills - Foreign language skills	- Application Form - Interview - References - Laboratory assessment of competency
SPECIAL KNOWLEDGE	- Extensive knowledge of Laboratory Medicine. - IT skills including a good working knowledge of Microsoft Office programs (i.e. Word, Excel, Powerpoint).	- Good understanding of other Pathology disciplines - Background knowledge of hospital specialties	- Laboratory assessment of competency

PERSONAL QUALITIES (*Demonstrable*)	- Composed and professional. - Good communication skills. - Ability to work as member of a team. - Resilience, determination and ability to work under pressure. - Conscientious and dependable - Sense of responsibility - Willing to learn - Flexible approach to working	- Ability to think originally and creatively to solve problems - Be able to lead a team - Adapt to change positively.	- Application Form - Interview - References
OTHER (*Please Specify*)		- Ability to travel between sites in a timely manner - Ability to speak Welsh	