**High Level Outline**

**XXXXXXXXXXXXX**

Biomedical Scientist

XXX Blood Sciences Laboratory, Hospital, Board

Tel: XXXXXXXXXX, Email:XXXXXXXXXXXXXX

I am currently employed as a Chief Biomedical Scientist in the Department of XXXX at Hospital and have >5 (XX) years of experience in a laboratory environment. I am a Chartered Scientist registered with the Health Care Professions Council and a Fellow of the Institute of Biomedical Science. I work in the blood sciences theme of healthcare science and routinely make complex scientific decisions to inform the diagnosis of a patient . I am involved significantly in training all grades of staff, including medical, scientific and support staff, and I represent NHS XXX Health Board at the IBMS Scottish Training Forum.

Educational History:

MSc Biomedical Science, XXXx (year)

BSc Chemistry with Biological Applications, University (year)

Employment History:

Year – Present: NHS Board

I started work as a trainee MLSO in (Year) in the Histopathology Department and transferred to the Haematology Department in (year) after I successfully completed my CPSM registration. I worked as a Biomedical Scientist (BMS) until (year) when I was promoted to a Senior Biomedical Scientist with responsibility for the Coagulation section. I progressed again to Chief Biomedical Scientist with responsibility for training in (year).

My current Duties include:

I undertake advanced screening on a daily basis ensuring validity and accuracy of results using my knowledge and expertise. I review, interpret and validate results of biomedical investigations adding scientific and clinically relevant comments. At times I may be working with results and films that have incomplete clinical data, have significantly changed or have multifactorial issues that need to be considered when interpreting them. I initiate further specialist testing and provide verbal advice to healthcare professionals including clinicians and nursing staff. This is important to ensure that patient management is not affected by these issues.

I undertake blood and bone marrow film reporting, using microscopy to identify

abnormalities and to suggest further investigations such as immunophenotyping to the

requesting clinician. I developed and implemented our blood film-reporting programme for BMS staff and plan the continued expansion of the programme to more complex haematological levels. This has involved close working with clinical staff. The programme draws on scientific evidence that I selected and reviewed to ensure it delivers the required training outcomes.

I create, promote and implement departmental training policies for all staff ensuring compliance with the appropriate professional bodies. I authored and maintain our departmental training manual. This covers two to three trainees annually and nine supervisors. I am responsible for the ongoing training of medical staff, BMS and BSW’s by identifying training needs and targets. I promote and support continued personal development (CPD) for all grades of staff by identifying individual needs and targets, creation of personal development plans, providing practical training assistance and organising CPD activities organising and supervising undergraduate and postgraduate training programmes. For example a postgraduate topic I led on recently was mentoring our newly HCPC registered BMS while they work towards their postgraduate IBMS Specialist Diploma.

**B) Generic Healthcare Science experience;**

I have been involved in the delivery of the Trainer for Trainers course when it was first established and have delivered the course material to healthcare science professionals covering all staff grades in the laboratory along with a NES trainer.

My work with The XXX University and their IPE department in delivering training to various healthcare strands includes medical students, nursing students and biomedical scientist students. This has given me an insight into how to improve working relationships between the various healthcare professionals involved and this all has a positive impact on providing service to patients.

I have supervised and signed off the HealthCare Support Workers handbook for support staff within the laboratory. As a member of the IBMS training forum I have also reviewed and provided feedback on the new IBMS qualifications for Support Workers that were issued this year. My work with support workers has focussed my development on an appreciation of the entire workforce model, not just graduate and postgraduate scientific staff, and the sustainability of our laboratory service.

I deliver training and lecturing to medical students and junior doctors when they are on placement within the laboratory. This ranges from an introduction to Haematology covering the laboratory systems and procedures through to specific training needs such as screening and interpreting results, teaching coagulation, bone marrow staining and Haemoglobinopathy investigations.

As part of my senior management role in the laboratory I am aware of the structures and representation of the local healthcare forums and committees covering all of the three strands. My attendance at the IBMS Scotland Training Forum means I am aware of how healthcare science is represented at Scottish Government level and of the current initiatives which are being developed and supported. I have attended various events such as the Healthcare Science Modernisation event held in June 2012 where I had the opportunity to meet colleagues from all three healthcare science strands and participate in workshops to discuss relevant issues.

This has supported and developed my professional practice including awareness of the relevant national and local policies, my ability to review and reflect on data, communicate effectively to varied healthcare colleagues, and participate in the clinical and laboratory field.

**C) Leadership and organisation experience;**

I was integral in the setting up of laboratory placements for the current Biomedical Science course at The XXX University and its highly regarded approach to healthcare science teaching. This work taught me to project plan and map the required learning outcomes to ensure the requisite training was delivered across the life sciences thematic. I developed my scientific knowledge and skills across the life sciences thematic as we created, reviewed and selected evidence that satisfied the mapped learning outcomes. The placements were multi centred and I was involved in developing and guiding the specialist groups pooled from all three centres as they progressed through their modalities in fine detail to create the placement model handbook. This developed and strengthened my communication, organisational and leadership skills as the project progressed.

As a chief biomedical scientist I am actively involved in the current and future planning of the department’s direction. I provide advice on a wide range of issues including workforce planning including skill mix assessment and departmental workforce profiles, learning needs analysis, instrument procurements including new automated analysers, tracking systems, integrated laboratory platforms with pre and post analytical capability, automated digital cell morphology programmes, Information Technology procurement including electronic requesting, LIMS systems. I deputise for the laboratory manager and have represented him within NHS Grampian and the IBMS.

I work closely with the Quality Manager to ensure that our department is fully and continuously compliant with CPA and UKAS standards. I organise and undertake audit activities to support this aim. I am responsible for ensuring our department meets its turnaround targets on a daily basis and ensure the results produced are safe, and within known and acceptable ranges of certainty.

As part of my leadership and management development I have undertaken local health board courses in standard setting, conflict resolution, appraisal and have been mentored in the workplace by my manager and head of service.

**D) Healthcare science divisional experience and overarching theme experience**

I have presented at IBMS Scotland Training Forum events which are held annually where healthcare professionals including support workers, biomedical scientists and clinical scientists from the Life Sciences stream attend to discuss training matters. I have also been a facilitator at breakout groups and workshop sessions at these events as well. This Forum includes all thematic interests: blood sciences, infection sciences, cellular sciences, i have developed a share interest in themes beyond my own (blood sciences) as a necessary part of taking forward our shared training agenda. This is important to develop as the automated laboratories of the future will eventually consist of all three thematic strands. The emerging automation in the Infection Science theme means that these technologies can already by incorporated into the platforms currently used in the blood science arena. Multi thematic training will be integral to the success of these laboratories and the forum will be able to support this endeavour.

My work with the local placement educators group for The XXX University and the IBMS Scotland Training Forum allows me to work in partnership with colleagues from the life sciences divisions. These groups have representation from the three life sciences strands and their membership includes senior biomedical scientists, clinical scientists and clinicians. It provides us a forum to meet and discuss a wide range of topics and learn from each other’s experiences.

With senior Biomedical Scientists and clinical scientists I am involved in the gradual reconfiguration of Blood Sciences laboratories across Scotland and the current and future educational support they will require. Working together ensures that all the various service profiles required throughout Scotland from remote rural laboratories to large multi thematic laboratories can be reviewed and incorporated into the future development requirements. The forum has been actively involved in restructuring the postgraduate qualification in the Infection Science theme to more accurately reflect the role of molecular techniques currently being employed in laboratories.

I am planning the skill mix and training needs of our proposed blood sciences laboratory in Aberdeen and how to deliver the training required for all grades of staff. A venture of this magnitude requires careful project planning. I will be working closely with the laboratory manager and other clinical colleagues to realise the plan.

**E) Research experience**

I am responsible for mentoring and supporting research activities within the department as directed by our Head of Service. I am a project supervisor to undergraduate students from The XXX University during their fourth year Honours project. I supervise postgraduate biomedical scientists within the department who are undertaking MSc projects. Areas of research we have covered include the role of platelet flagging within the automated full blood count analysers and the potential impact on patient care for various patient groups. My own MSc research project was based on has covered the role of Heparin Induced Thrombocytopenia (HIT) within patient groups in XXXX Hospital. HIT is a disorder with significant impact on patient mortality especially within the Intensive Therapy population group. I looked at the laboratory assay diagnosis provided by our laboratory with the aim of improving the diagnosis and hopefully aiding patient care. This research required special ethical approval from [other Health Board] as patients in ITU are considered vulnerable individuals and have stricter ethical approval programmes. My research led to a change in the XXX laboratory diagnosis of HIT and the new technique is used in the department. In other projects, I have also studied the role of Vitamin K and whether it would be useful within a pre cardiac surgery environment and was involved in presenting a poster for the BSH. My research development includes deepening my understanding of experimental protocols, method, calibration and statistical treatment of data. I guide our postgraduate trainees on probability and the limits of certainty in any scientific experiment – for example why our analysers (CITE) use reference ranges rather than absolutes. This ensures that we continue to be innovative in our practice and deliver the best service provision to support the patient while they engage with their healthcare experience.

**F) Specialty experience from within the HCS theme**

I have eighteen years’ experience with the Haematology laboratory eight of them as a Chief Biomedical Scientist. I review results on a daily basis and provide complex scientific advice on results and laboratory systems. I am involved in the creation, reviewing and definition of the departmental screening ranges for results and then have responsibility to ensure all staff are trained and compliant in using them.

I liaise and discuss patient results with clinicians on a daily basis, give clinical opinion, and attend morphology review and clinical review multi-disciplinary team meetings where patient management is discussed. I attend Haematology Out-Patient clinics and participate in ward rounds on the Haematology ward. This allows me to better understand the clinical consequences of my decisions and provide a safe and effective service to patients. It supports my clinical evidence base and when combined with the scientific/laboratory evidence base ensures that the patient receives a fully comprehensive review. Clinical liaison allows me to make informed judgements about patient blood film and bone marrow reports that are used in patient management. It supports me in screening and interpreting results that may be complex, incomplete or conflicting and which I may have to discuss with clinicians who contact the laboratory. Clinical liaison also supports my specialist Haematology teaching as I am responsible for the training of staff in the areas of result interpretation and blood film morphology. I have responsibility for ensuring these programmes are delivered to all staff. I am a verifier for the IBMS Certificate of Competence and an assessor for the IBMS Specialist Portfolio in Haematology.

I attend a variety of events including the British Society of Haematology yearly conference, NEQAS events and user group meetings to ensure I maintain my knowledge and also to horizon scan for future innovations that can be incorporated into the laboratory repertoire or provide research avenues to improve service delivery to patients.

Demands on my specialist blood sciences knowledge include the identifying and procuring an automated digital cell morphology system as well as a pilot site for [supplier XXX] programme upgrade which has been created specifically for Haematology systems. This I expect to revolutionise the way haematology departments views and interprets laboratory results. I was closely involved in the selection and implementation of the [supplier XXX ] system the department currently uses which was the first of its kind installed in the United Kingdom, and I will play an integral part in the next technology procurement.