NHS Grampian

**Job Description**

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| JOB IDENTIFICATION |  |
| **Job Title:** | Genetics Laboratory LIMS/IT Manager  |
| **Department(s):** | Laboratory Directorate |
| **Hours:** | 37.5 hours per week |
| **Salary:** | £37,570 - £44,688 |
| **Location:** | Molecular Genetics / Laboratory IT, Polworth Building , Aberdeen Royal Infirmary |
| **Hours:** | 37.5 hours per week |
| **Contract:** | Fixed Term/Secondment for 1 year |
| **Job Reference:** | PM008850 |

###### SECTION 2

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|  | **Job Purpose**  The Genetics Laboratory Information Management System (LIMS)/IT Manager will be responsible for the implementation, development, configuration, maintenance and updating of the upcoming LabWare LIMS system. The system has already been rolled out within NHS Tayside and frequent dialogue between the two NHS Organisations will be required to meet operational, business, quality management and audit IT requirements of the Genetics laboratory, including National services division (NSD) and NHS Grampian. To assist in the continuing development of, and change in, Information Technology within the Genetics Laboratory by supporting the Head of Laboratory Genetics.The post holder will report to and be appraised jointly by the Head of Laboratory Genetics and the Laboratory Computer Manager. |
|  | **Organisational Chart** (Please identify this post clearly in the structure – as a minimum show 2 levels above and 2 levels below (where relevant). GeneticsLIMS/ITManagerLaboratory Computer ManagerHead LaboratoryGenetics |

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| **1** | **Communication and relationship skills**The Genetics Laboratory LIMS/IT Manager operates in a multidisciplinary environment and will have contact with the computer leads and staff from the Genetics department, the Laboratory IT department and other NHS departments.The routine tasks associated with the job involve liaising with Genetics and Laboratory staff in order to co-ordinate activities. The post holder is required to have the communication skills to explain the issues relating to system problems to other staff in the laboratory with limited IT knowledge.There are in excess of 40 users of the Genetics systems. There are also a considerable number of links between the Genetics systems and other systems both within and external to NHS Grampian. As a consequence of this, the Genetics LIMS Manager will be required to liaise and communicate effectively with a wide variety of healthcare professionals. |
| **2** | Knowledge, training and experienceApplications may be taken from personnel with a non-laboratory or non-NHS background on the condition that they can demonstrate achievement and skills similar to those outlined below.The Genetics Laboratory LIMS/IT Manager must have a highly developed specialist knowledge of operational diagnostic Technologies and of relevant Information Technology, underpinned by theory and extensive experience. This will require an in depth specialist knowledge of laboratory or IM&T procedures acquired through extensive professional training and experience.The Genetics Laboratory LIMS/IT Manager should ideally have had a minimum of five years development experience at a senior level preferably in a hospital laboratory or eHealth role and experience of IT operations, maintenance and management or be in a position to demonstrate similar levels of experience and achievement if from a non-NHS or non-laboratory background.The Genetics Laboratory LIMS/IT Manager should hold an appropriate masters degree or degree equivalent or be able to demonstrate relevant specialist knowledge to an equivalent level.In addition the Genetics Laboratory LIMS/IT Manager will be required to :* Have maintained, improved and updated their professional knowledge and skills and participated in CPD.
* Investigate and resolve computing issues within the genetics laboratory and hence must possess a highly developed specialist knowledge, underpinned by theory and practice, of a wide range of laboratory / genetics procedures.
* To have a detailed knowledge of the various modules and software that comprises the existing Genetics systems.
* To have a solid grounding in the application used to extract data from the existing genetics systems inc FileMaker will be required as well as the ability to export data to various Microsoft programs where accuracy is important
* To have a working knowledge of the commands used in LabWare LIMS and LIMS Basic
* To have a knowledge of Microsoft based operating systems with emphasis on the version of Windows currently in use
* Experience with using and troubleshooting Microsoft Office, with emphasis on MS Word, MS Excel and MS Access
* Working knowledge of enterprise database technologies, such as MS SQL Server
* Good understanding of PC hardware
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| **3** | Analytical and judgemental skillsThe fundamental role of the Genetics Laboratory LIMS/IT Manager will be to implement, develop, support and maintain the Genetics LIMS System. The Laboratory IT Manager will also assist the Genetics LIMS Manager in terms of advice and guidance on best laboratory IT practice. The Genetics LIMS/IT Manager will provide support to the Genetics department to ensure efficient day to day operation of the Genetics IT. This will include the operational efficiency of the systems as well as maintaining the integrity of the data held on the systemTo assist and if necessary, deputise for the Head of Laboratory Genetics in the following issues:* Co-ordinate and provide regular updates on the implementation of the Grampian LabWare implementation.
* To be the point of contact for Genetics Laboratory IT and provide specialist advice as required.
* To attend regular and relevant meetings, within NHS Grampian in order to maintain the continuing functionality of Genetics Laboratory Service.
* To be familiar with existing tools and to be able to construct processes that will monitor and assess the computer system’s performance and security.
* To have the ability to deal with day to day problem solving and the resolution of data issues, which will necessitate the use of a wide range of analytical skills and experience.
* To ensure that procedures are in place that will permit the extraction of data from the genetics system for a variety of statistical and audit purposes, including the review of laboratory performance by National Services Division (NSD) and senior hospital management.
* Participate in the development and delivery of training for all relevant staff who are involved with the computer, both within and out with the Laboratory.
* Maintain personal professional development of self, the laboratory computer assistant and the discipline specific computer leads, in order to ensure the continuing development of the Genetics LIMS system.
* To maintain a high standard of documentation of data handling procedures
* To ensure that all Laboratory data handling meets the requirements of the Data Protection Act.
* To ensure that the Computer system and access to patient data complies comply with the NHS Scotland Code of Practice on Protecting Patient Confidentiality.
* To ensure that procedures relating to Genetics Computing comply with the Freedom of Information Act.

The Genetics LIMS is operational Mon – Fri, 08:00 – 18:00. The Genetics Laboratory LIMS/IT Manager will operate within Genetics to ensure the reliability and availability of the system and that it runs efficiently and error free. This will involve deputising and assisting the Head of Laboratory Genetics and other senior managers in coping with critical system issues and operational errors.  |
| **4** | Planning and organisational skillsThe Genetics Laboratory LIMS/IT Manager will operate under the direction of both the Laboratory Computer Manager and the Head of Laboratory Genetics in order to develop and configure the new Gentics LIMS and organise the daily priorities and decision making required to ensure the correct operation of the computer system. These decisions will be made with regard to the overall requirements of the genetics service as well as Clinical users and on the basis of constant monitoring of the system.It is expected that the Genetics Laboratory LIMS/IT Manager will be required to give advice and support on a wide range of computing issues to staff at all levels in the Clinical Group as well as to staff in the acute sector and in primary care.Prioritising the order of various tasks involved with the post will be carried out after assessment of the needs of the genetics service and by the Laboratory Computer Manager in conjunction with the Head of Laboratory Genetics. The Genetics Laboratory LIMS/IT Manager will be expected to adjust workload plans, as required by urgent requests, system failures and interruptions.The Computer systems are completely integrated into the operation of the genetics service, and is a fundamental part of the functionality of the service. The Genetics Laboratory LIMS/IT Manager must be familiar with the functionality of the Genetics laboratory and must have the ability to communicate on the major issues to various groups within genetics. Other duties as delegated by the Head of Laboratory Genetics.  |
| **5** | Physical SkillsRequirement for post holder to use a VDU more or less continuouslyon most days.Advanced keyboard skills are required to be able to interpret the Lab System and present data. |
| **6** | Responsibilities for patient/client careNo direct patient contact, however maintenance and operation of the laboratory IT systems at all times is essential to maintain departmental turnaround times and deliver patient care. |
| **7** | Responsibilities for policy and service development implementationThe Genetics Laboratory LIMS/IT Manager operates in a multidisciplinary environment and will have contact with the computer leads within genetics and Laboratory IT department.Contribute to the procurement and selection procedures for future IT laboratory information systems. Oversee and integrate all genetics systems (IT packages/equipment linking analytical equipment to the Genetics LIMS IT system).Proposes changes to working practices to genetics staff and managers as a result of new guidelines.Routine tasks associated with the job involve developing and maintaining current and upcoming Genetics LIMS systems. Liaising with genetics lab staff in order to co-ordinate activities. The post holder is required to have the communication skills to explain the issues relating to system problems to other staff in the laboratory with limited IT knowledge. The Genetics Laboratory LIMS Manager will also be expected to assist users of the LIMS system in developing their IT knowledge and skills where appropriate.There are also a considerable number of links between the genetics systems and other clinical systems both within and external to NHS Grampian. As a consequence of this, the Genetics Laboratory LIMS Manager will be required to liaise and communicate effectively with a wide variety of healthcare professionals. |
| **8** | Responsibilities for financial and physical resourcesThe Genetics Laboratory LIMS/IT Manager will require the specialist knowledge, expertise and experience necessary to assist in the management and development of strategies for the Genetics and its associated IT systems.The genetics systems, along with its associated peripherals and linked PCs, is valued in excess of £300,000 and in addition, is interfaced to laboratory analysers valued at over £1,500,000. Ensuring that the genetics LIMS is kept fully up to date with new developments in software and hardware and making sure that the system benefits from advances in computing technology.To maintain an inventory of all IT components relating to the operation of the Genetics Laboratory Computer. |
| **9** | Responsibilities for human resourcesThe Genetics Laboratory LIMS/IT Manager will also be expected to assist users of the genetics system in developing their IT knowledge and skills where appropriate.Take a leading role in the education and training of all levels of laboratory staff in the operation of laboratory system and in all areas of Laboratory Information Technology.The Genetics Laboratory LIMS/IT Manager will be expected to deputise for other members of the Genetics management team as required.Other duties as delegated by the Head of Laboratory Genetics. |
| **10** | Responsibilities for information resourcesThe Genetics Laboratory LIMS/IT Manager will require the specialist knowledge, expertise and experience necessary to assist in the management and development of strategies for the Genetics Laboratory computer and its associated systems.This demands the following skills:* Knowledge of the hardware and software architecture of the current genetics computer systems.
* The ability to administer and develop the existing and future genetics LIMS, an understanding of the database language and a comprehensive understanding of the various modules of the LIMS as well as an understanding of the electronic communications between clinical systems.
* Expertise and experience in Microsoft Windows Server, the genetics computer’s operating system, will be required to the level of system administrator to ensure that system is monitored and suitably maintained.
* Expertise will also be required in the use of various versions of Microsoft Windows and Microsoft Office as well as the business information tools used to extract data from the genetics systems.
* To ensure the correct maintenance and integrity of patient results on the genetics laboratory computer’s database
* The ability to extract data from the LIMS and present this data using a variety of utilities. To accomplish these tasks, the post holder will require expertise in a number of data extraction tools, business intelligence programs and Microsoft products.
* A broad knowledge and experience to a senior level of NHS diagnostic laboratory operations, organisations and management.
* Have a working knowledge of hospital data systems, such as SCI Store and Trakcare.
* An understating of commonly used healthcare data protocols, such as HL7
* The post holder will regularly use a range of computer equipment and systems including servers, network equipment, PCs as well as printers linked to genetics analysers and PCs. Creation and export of PDF reports to Grampian SciStore system.
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| **11** | Responsibilities for research and developmentAdvise and implement, where appropriate, software packages and upgrades.Regularly undertakes surveys and audits of quality indicators and develops methodologies for the analysis and interpretation of genetics data to improve the development of automated audit functionality, KPI (key performance indicators) metrics and clinical information packs. |
| **12** | **Freedom to act**Works unsupervised to objectives set by the Laboratory ComputerManager and the Head of Laboratory Genetics.Use personal initiative and take crucial decisions under pressure.Have an ability to work and take decisions both independently and as part of a team.Have an ability to prioritise workload in complex situations and to meet deadlines.The ability to multitask and prioritise work to meet deadlines and targets.Plans own work on a daily basis based on organisational and departmental priorities as they evolve.Provides support to troubleshoot genetics laboratory IT issues at short notice in order to maintain a genetics service provision under difficult circumstances such as analytical or computer failure. |
| **13** | Physical effortLight physical effort as a result of a combination of sitting at a PC, standing and walking.Considerable keyboard use requiring a high level of concentration and accuracy |
| **14** | Mental effortProlonged concentration and focus are required when dealing with many of the complex issues and problems of managing the Laboratory system. There can be frequent interruptions in order to respond to problems and urgent issues.The Genetics Laboratory LIMS/IT Manager would be expected to provide expert advice and guidance to all users of the system. This will require a variety of presentation and communications skills. |
| **15** | Emotional effortCoping with the challenge of maintaining a highly complex computer system and ensuring that the system is able to respond to the varied needs and demands of the Clinical Group and its users.Exposure to distressing or emotional circumstances is rare |
| **16** | Working conditionsThe Genetics LIMS workstations are located and operated in a generally busy and stressful medical laboratory environment. |

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|  | **NHS GRAMPIAN****PERSON SPECIFICATION** |
| The Person Specification should meet the demands of the job and comply with current legislation. Setting unnecessary standards may, for example, unfairly discriminate against one sex, the disabled or minority racial groups. Applicants should be assessed in relation to their ability to meet the real requirements of the job as laid down in the job description. Shortlisted candidates **MUST** possess all the essential components as detailed below.  |

**POST/GRADE: Genetics Laboratory LIMS/IT Manager**

**LOCATION/HOSPITALS: NHS Grampian**

# WARD/DEPARTMENT: Laboratory Genetics

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| **ATTRIBUTES** | **ESSENTIAL** | **DESIRABLE** |
| Qualifications | An appropriate Masters degree or degree equivalent, or be able to demonstrate relevant specialist knowledge to an equivalent level. | Participation in a CPD Scheme |
| Experience | Knowledge of operational diagnostic Medical Laboratory Technology and relevant Information Technology. This will require an in depth specialist knowledge of genetics/laboratory or IM&T procedures. | A knowledge of the modules that comprise the genetics LIMS computer.A knowledge of data extraction programs.A good working knowledge of Microsoft Windows ServerExperience using Microsoft OfficeGood working knowledge of enterprise database technologies, such as MS SQL Server |
| **Special Aptitude and Abilities** | Requires the specialist knowledge, expertise and experience necessary to implement and provide ongoing development of the Genetics LIMS, including the long term development of strategies for the genetics computer system. | The ability to work under pressureDecision making as an individual and as part of a teamThe ability to prioritise a workload |
| **Disposition** | The ability to operate as part of a team.Approachable and helpful to members of staff and users of service.Ability to liaise and communicate with the computer leads and staff from all departments. |  |
| **Physical Requirements** | Prolonged concentration and focus are required when dealing with many of the complex issues and problems of the Laboratory system. |  |
| **Particular Requirements****of the Post** | Experience of working in a hospital laboratory environment and experience of genetics and or laboratory IT operations. |  |

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| **MAJOR RISKS IN DOING THIS JOB** |
| *Please indicate the major risks the job holder could face in doing this job e.g. lifting patients/objects, working with hazardous substances, dealing with violence and aggression..**If there are no major risks for the job holder please tick this box X* |