



JOB DESCRIPTION

1. Description

Title	Scientific Programme Manager
Team	Scientific [EQA scheme management]
Salary	£45,479 – £54,915 per annum ¹
Hours of duty	37.5 Hours per week
Responsible to	Principle Scientific Programme Manager
Accountable to	Operations and Scientific Directors
Liaises with	EMQN CIC Management Team, EMQN CIC Colleagues, Users of EMQN CIC services

2. Purpose

- To deliver high quality ISO17043 accredited genomics based External Quality Assessment (EQA) services provided by EMQN CIC.
- To ensure the efficient and effective logistical management of aspects of these services provided by EMQN CIC.
- To contribute to other activities (for example, quality management), as deemed necessary to ensure that EMQN CIC complies with all relevant legal and regulatory standards.

3. Context

EMQN CIC monitors the performance of clinical genomics diagnostics laboratories from around the world and accordingly contributes to Clinical Governance on a national and international level. The service aims to reduce harm to patients caused by erroneous test results, and to improve test quality by education and demonstration of best practice. The post-holder assists with supervision of the administrative staff and liaises with the numerous external providers of subcontracted services relevant to the provision of the EQA schemes organised by EMQN CIC [Additional background information is provided in Appendix I].

4. Organisational Structure

The governance and organisation structures of EMQN CIC are shown on the next page.

¹ Pro-rated for part-time employees.

Figure 1: Governance structure

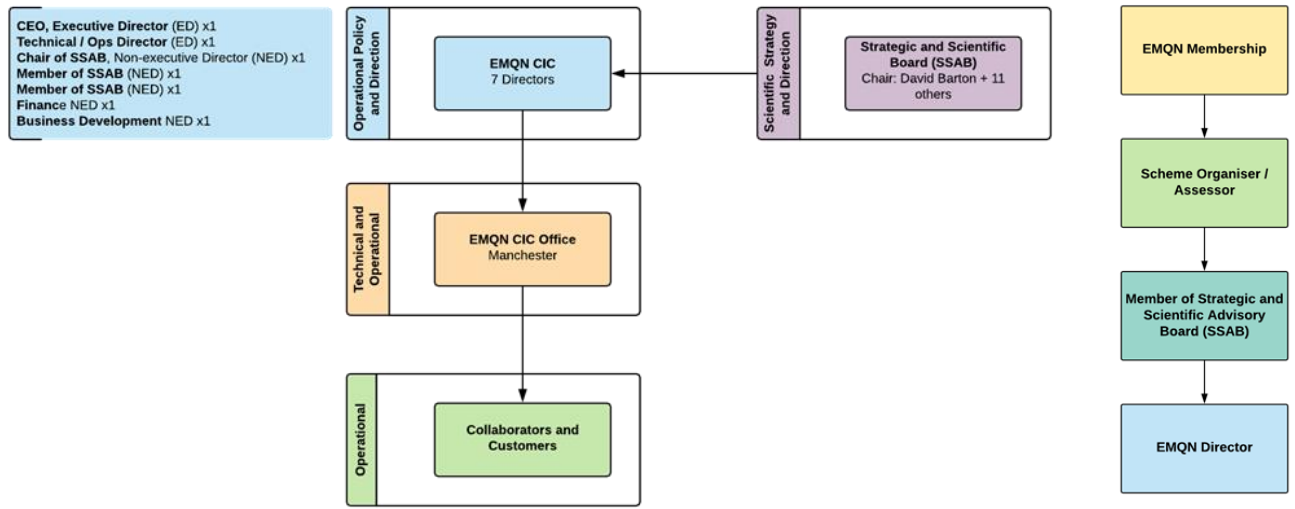
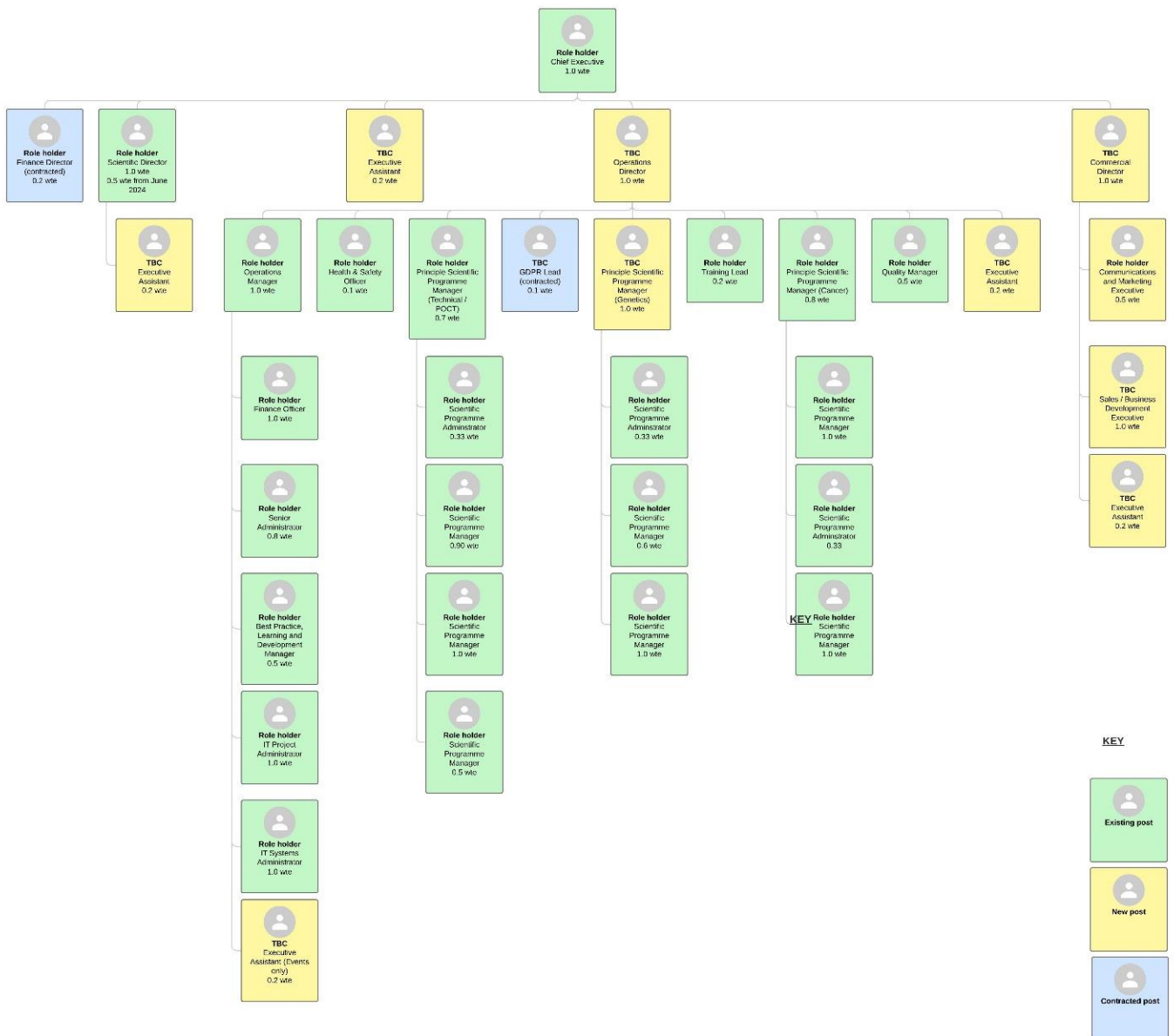


Figure 2: Company structure



5. Key results area

Managerial

- To assist the Operations and Scientific Directors in the proper running and further development of EMQN CIC, as directed and mandated by the Chief Executive Officer, the EMQN CIC Board of Directors and the Scientific and Strategic Advisory Board (SSAB).
- To assist the Operations Director in ensuring the EMQN CIC's adherence to the Quality Standards required to maintain accreditation by United Kingdom Accreditation Service (UKAS) including taking responsibility for a designated component of quality management / governance (for example, document control, audit etc).
- To achieve high operational standards by prescribing and promulgating these standards to EMQN CIC staff.
- To assist in the management of other staff as required, according to its Organisation's policy and procedures.
- To be responsible for all aspects of EQA scheme project management including planning and implementation of logistics in support of service delivery.
- To provide expert scientific advice and interpretation on EQA activities to Scheme participants, Specialist Advisory Groups, Committees, the EMQN CIC Board of Directors and the Scientific and Strategic advisory Board (SSAB) and to other EQA Organisers and colleagues.
- To contribute actively to the setting of national and international standards and policy, to support standard-setting as appropriate and to initiate and carry out audit of these standards as required.
- To facilitate and participate in the development and publications of best practice guidance documents.

Scientific and Technical

- To oversee the preparation of EQA specimens in accordance with EMQN CIC specifications and policies and to undertake analytical procedures of an advanced or highly complex nature as appropriate, requiring special knowledge for their execution and involving handling of biological material (e.g. blood, plasma, DNA and/or unfixed/ fresh tissue samples) and noxious chemicals as required by the post.
- To undertake complex calculations, manipulations and interpretation of data requiring long periods at the computer and a high degree of accuracy, so as to ensure the accuracy and appropriateness of all reports - annual and monthly (including expert commentaries and surveys of recent literature sent to all participants and written and verbal communications with individual participants) - prepared by the post holder and to keep records of these as required by UKAS, often working under considerable time pressure in order to meet essential deadlines.
- To be responsible for and carry out proactive surveillance of participants' performance to assist the Scientific Director and Quality Manager in providing regular reports to relevant regulatory authorities, reports which may result in clinical laboratories with unacceptable performance being required to stop performing tests.
- To assist the Scientific Director in identifying the need for and preparing reports on adverse method performance and other relevant clinical incidents relating to all analytes monitored by EMQN CIC for the Medicines and Healthcare products Regulatory Agency (MHRA) as appropriate.

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- To ensure the efficient and effective logistical management of all services provided by EMQN CIC.

Laboratory Informatics

- To comply with local and national policies for the safe, legal secure and confidential processing and storage of technical and other information provided by EMQN CIC participants or elsewhere, in accord with local, national and other policy and to use EMQN CIC Databases according to authorised protocols and compliant with the rules of the General Data Protection Regulations (GDPR).
- To be competent in the use of Microsoft office and Teams (or equivalent) including, spread sheets and processing of data for audit, research and other scientific information gathering, including preparation of complex graphs for EMQN CIC Annual Reviews and other reports.

Clinical

- To provide expert advice to multidisciplinary professional groups developing regional, national and international services relevant to diagnostic tests within the remit of EMQN CIC.

Research and development

- To undertake research and development (which may include the evaluation of new and improved procedures, instruments and reagents) within the remit of EQA activities.
- To publish research work in peer reviewed journals, to present the work nationally and internationally (usually to audiences of 20 to 200 specialists and non-specialists) and to referee papers for scientific journals.

Educational

- To undertake limited training activities (on request from partner organisation such as local hospitals and universities) including supervision of research projects, training of medical scientific and technical staff, education of users of the EMQN CIC service nationally and internationally
- To maintain continuous professional development (CPD) appropriate to the role and the range of EQA services being managed, ensuring awareness of issues related to all aspects of clinical diagnostic genomic testing.

General

- To participate in quality management system (QMS) activities as part of the Quality Team (for which separate role specific descriptions will be provided).
- To comply with the policies and procedures of EMQN CIC, by observing and adhering to local and national health and safety policies, maintaining good working relations with all members of staff, promoting effective teamwork, and treating everyone associated with EMQN CIC and all EMQN CIC participants with courtesy and respect, at all times maintaining and promoting the professional image of EMQN CIC.
- To be personally responsible for his/her own work and workload management, working with a high degree of autonomy, subject to the supervision and direction of the Operations Director or other designated senior staff.

6. Equipment and machinery

- Has wide ranging knowledge of genomic testing equipment, technologies and methods used by EMQN CIC participants.

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- Has responsibility for the daily operation, staff training, maintenance and performance quality of highly specialised laboratory investigations and highly complex laboratory instrumentation, used by EMQN CIC.

7. Information Management Systems

The post holder is required to spend long periods of time in front of the computer, and has knowledge of and uses:

- The EMQN CIC computer system and its use for internet access and e-mail communications, word processing and statistical and graphical applications (e.g., Excel), data input and analysis, and production of reports for participants, manufacturers, and national, international, and other advisory groups.
- The Q-Pulse Quality Management System (QMS) software for document control, audit and other activities associated QMS activities including error logging and incident reporting.
- The EMQN CIC website and associated forms-based software.
- The YouManage HR software.
- The Freshdesk software for customer support systems.
- Project management software, for example Wrike (or equivalent).
- Other software as required to undertake EMQN CIC activities. For example, using telecommunications software (e.g., Zoom, Teams) to liaise with key suppliers or customers.
- Relevant local, national and international standards (e.g. UKAS and ISO standards) and guidelines (e.g. Association for Clinical Genomic Science (ACGS) Best Practice Guidelines, National Institute for Clinical Excellence (NICE), Royal College of Pathologists, College of American Pathologists)..

8. Assignment and Review of Work

- Works autonomously, with a high level of individual responsibility, with or without scientific and technical support, within the overall direction of the Operations Director.
- Participates in regular meetings of all EMQN CIC staff to discuss strategic objectives, evaluate progress, audit EMQN CIC errors (agreeing remedial action to be taken), and agree on assignment of work.
- Is subject to annual appraisal by a Principle Scientific Programme Manager or other senior staff.

9. Decisions and Judgements

- Works autonomously to implement managerial and clinical policies, procedures and guidelines relating to the work of EMQN CIC.
- Assists the Operations Director in managing the EMQN CIC workload, staff deployment and allocation of resources.
- Organises their own time and prioritises work accordingly.
- Contributes to the supervision of trainee and other scientific, technical and administrative staff as appropriate.

10. Challenges and Difficulties

The most challenging parts of the job are:

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- Communicating with individual EQA scheme participants and colleagues or larger groups of scientists and clinicians from hospitals, universities, or diagnostic manufacturers nationally and internationally. Whether in writing, by telephone or in person, this is a challenge that requires both specialist knowledge and excellent communication skills.
- Assessing and interpreting EMQN CIC data is a demanding role requiring specialist knowledge, analytical and mathematical skills, and the ability to concentrate on and manipulate large amounts of numerical laboratory data for long periods of time.
- The nature of the work is often unpredictable, requiring multitasking and frequent changes to work prioritisation, as well as being subject to frequent interruptions e.g., from telephone calls and other members of staff seeking advice. An ability to work under pressure, to handle complaints effectively and to communicate clearly with all grades of staff in many different organisations is essential.

11. Communication and Relationships

- To explain the analytical and clinical significance of highly complex results to a range of staff including Consultant Heads of Department of participant laboratories and senior executives in diagnostics manufacturers.
- To communicate effectively with staff from partner organisations (e.g., Genomic Diagnostic Laboratories (MFT), and University of Manchester).
- To interact with Scientists and other health care professionals as required at local, national and international level, including participating in professional networks of staff.
- To interact with biomedical and other scientific staff about work prioritisation, work quality etc.
- To present research and development results, audit findings, and new policies and guidelines at local, national and international meetings.
- To teach laboratory staff in formal lectures and seminars in both small and large groups and provide instructional training and on-going education as required.
- To investigate, identify, troubleshoot, and communicate about analytical or clinical problems to ensure their effective and rapid resolution.
- To motivate and train junior staff.
- To maintain participant confidentiality in line with EMQN CIC policy and all legal requirements.

12. Physical, Mental, Emotional and Environmental Demands

Physical

- Combination of sitting, standing, and walking. Occasional requirement for lifting (e.g., equipment). Reasonable adjustments to working patterns and additional support can be made for this.
- Frequent requirement for sitting in a restricted position for long periods of time in front of a VDU while preparing reports at computers, while retaining a high degree of concentration and requiring keyboard skills.
- Accurate hand-eye coordination for fine pipetting (measurement of very small volumes).

Mental

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- There is frequent requirement for prolonged intense concentration (e.g., assessment of EQA data requires the ability to concentrate for long periods of time while reviewing and validating large numbers of computerised laboratory results with frequent interruptions for enquiries, immediate clinical advice, handling complaints etc.). These interruptions are unpredictable and may require multi-tasking and reprioritisation of work pattern.
- Occasionally need to challenge vigorously medical or managerial opinions, maintaining conviction in own knowledge and opinions.

Emotional

- Occasionally required to direct staff to implement changes with which they may not agree to some aspect of work procedures or priorities.
- Occasionally need to challenge vigorously medical or managerial opinions.

Environmental

- Occasional exposure to unpleasant working conditions (e.g., uncontained blood, unfixed/fresh tissue samples), toxic/carcinogenic chemical hazards and potentially infectious (Category III) agents.

13. Risk Management

- Fulfil a proactive role towards the management of risk for all their actions. This entails the risk assessment of all situations, the taking of appropriate actions and reporting of all incidents, near misses and hazards.

14. Confidentiality and Information Security

- Uphold the confidentiality of all records held by EMQN CIC. This duty lasts indefinitely and will continue after the post holder has left EMQN CIC employment. This includes all Information that identifies individuals in whatever form (paper/pictures, electronic data/images or voice) is covered by the 1998 Data Protection Act and the 2018 General Data Protection Regulations (GDPR) and should be managed in accordance with this legislation.

15. Security

- Ensure the preservation of all EMQN CIC property and resources, abiding by the EMQN CIC security policy.

16. Equal Opportunities and Fair treatment

- Immediately report any breach, or suspected breach, of both equal opportunities and fair treatment guidelines.

17. Smoking

- Abide by the EMQN CIC smoking control policy, which applies to all staff and visitors and extends to the grounds as well as internal areas. Staff appointed will agree not to smoke on the EMQN CIC premises.

18. Alcohol

- Must not consume alcohol during the working day. Consumption of alcohol affects your work and presents a significant operational and reputational risk to EMQN CIC.

19. Team Briefing

EMQN CIC operates a system of team briefing through regular staff meetings and manager one-to-ones, based on the principles that people will be more committed to their work if they fully understand the reasons behind what is happening in their organisation and how it is performing.

20. Equality and Diversity

EMQN CIC operates an Equal Opportunities Policy is committed to promoting equality of opportunity, celebrating and valuing diversity and eliminating any form of unlawful discrimination across our workforce, ensuring our people are truly representative of the communities we serve. All individuals regardless of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation are welcomed.

21. Other

- This job description will be reviewed as part of staff appraisal.
- This job description is an outline of the current position and may be amended in detail or emphasis in the light of the future requirements for the service, as well as the personal development needs of the post-holder. All amendments and changes to the job description will be agreed with the post holder and in line with EMQN CIC Policy.

AGREEMENT

I acknowledge receipt of this Job Description and understand and accept the requirements defined within it.

Signed _____ (You)

Dated _____

Signed on behalf of EMQN CIC

Dated _____

Appendix I. Remit and organisation of EMQN CIC

Background

EMQN CIC has been providing EQA since 1997. EMQN CIC is physically located within Unit 4, Enterprise House, Manchester Science Park.

Range of tests monitored

EMQN CIC provides quality monitoring for specialised genetic tests ranging from monogenic disorders, prenatal diagnosis, newborn screening for inherited disorders to molecular pathology tumour testing cell free DNA samples (cfDNA) and technical aspects of the genetic testing process. The field of genomic testing is continually expanding and EMQN CIC is committed to meeting the expanding need for EQA provision.

Volume of service and workload

EMQN CIC provides over 80 different EQAs for a variety of diseases to approximately 3000 laboratories in 85 different countries worldwide. Many EQAs are provided for rare diseases and therefore the need for EQA is even greater as laboratories do not have high throughput of samples and are often limited in the range of mutations seen. Appropriate samples along with clinical case scenarios are distributed to participants and they are required to test the samples using the most relevant test in their repertoire and submit to the EQA centre interpretative reports using their routine format. These reports are assessed (blind) for genotyping accuracy, interpretation of the results and clinical accuracy by a team of assessors. The EMQN CIC centre then issues a report to each laboratory detailing scores for each clinical case, the mean scores and feedback comments from the assessors. A scheme report, for each disease, is published for every EQA run, both before and after the appeals process, detailing performance levels and discussing any issues arising from that EQA run. All EQAs are provided according to a strict timetable.

Quality Assurance of EMQN CIC activity

All hospital laboratories must show satisfactory performance in the EMQN CIC (or other equivalent accredited EQA scheme) in order to gain Accreditation. EMQN CIC undertakes regular quality monitoring to ensure that its service is both reliable and valid. It is accredited to ISO standard 17043 and therefore subject to regular external independent review by the United Kingdom Accreditation Service (UKAS).

Liaison with other EQA providers

EMQN CIC is one of a number of organisations based within the UK that together provide a comprehensive quality monitoring service for all commonly performed tests done in hospital laboratories. EMQN CIC collaborates with other EQA organisations to provide shared EQA schemes (e.g. the Next Generation Sequencing EQA scheme is run jointly by the EMQN CIC and Genomics Quality Assessment (GenQA) and there are several joint ventures in collaboration with the International quality Network of Pathology (IQNPath)).

Presentation of data at national and international meetings, webinars and through publications

Education of EMQN CIC staff is recognised as a key strategy to improve quality of performance and forms a major part of the work of the EMQN CIC.

Financial Management

EMQN CIC is entirely self-funding through fees paid by participating laboratories. Reflecting the continual expansion of the schemes, the EMQN CIC income has increased tenfold since 2002. This increase has been gradual and is sustainable.

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PERSON SPECIFICATION

Job Title: Scientific Programme Manager
Salary range: £47,753 – £54,915 per annum

Attributes	Essential Criteria	Desirable Criteria	Method of assessment
Qualification Attainments	<ul style="list-style-type: none"> • First or second-class honours B.Sc. degree in Genetics, Biochemistry, Molecular Biology, Biomedical Sciences, Genomic Sciences, or allied subject. • Appropriate publications in peer-reviewed journals. • Evidence of continuing professional development. 	<ul style="list-style-type: none"> • Masters, or Ph.D., or equivalent level of experience in a relevant subject • Strong, demonstrable knowledge of research methodology relevant to genomics. • Appropriate professional registration as a registered "Clinical Scientist" (or equivalent for non-UK applicants) to a relevant recognised body (for example Health & Care Professions Council (HCPC), National School of Healthcare Science (NSHCS), or Academy for Healthcare Science (AHCS) Certificate of Equivalence, or equivalent non-UK organisation). 	Application form/interview/ Certificates
Previous Experience	<ul style="list-style-type: none"> • Previous time in post as a Genomics Scientist in a clinical, biomedical or research setting. 	<ul style="list-style-type: none"> • Good practical skills and experience in complex molecular techniques. 	Application form/interview/ References
Special Skills & Knowledge	<ul style="list-style-type: none"> • Ability to analyse problems and evaluate solutions. • Ability to gather and assimilate information i.e., literature searches, use of internet and relevant clinical databases. • Computer literacy is essential. • Ability to communicate complex information in both verbal and written formats. • Project management skills (for example implementing a new service, planning a research project). 	<ul style="list-style-type: none"> • Experience of writing clinical diagnostic reports requiring clinical knowledge and clinical interpretation of results. • Experience and knowledge of the specialist theory and practice of external quality assessment (EQA) required for provision of a comprehensive EQA service. • Experience of Next Generation genomic diagnostic technologies. • Experience of Audit, Appraisal and Risk Management. • Written and spoken knowledge of another language (e.g., French, German, Spanish, Italian). • Ability to organise the training and work of others. 	Application form/interview/ References

Key Personal Attributes	<ul style="list-style-type: none"> Developed interpersonal skills to enable adequate communication (both written and verbal), with a range of clinical and non-clinical colleagues. Ability to work flexibly within a team but also with minimal supervision. Proven self-motivation and ability to work under pressure. 	<ul style="list-style-type: none"> Ability to lead a team (which may be composed of members from different countries) and to work flexibly either as a team member or to be self-motivated, as appropriate. Ability to direct and motivate staff / senior colleagues in own and other institutions and countries (e.g., when leading EQA projects). Willingness to travel (as the role requires some international travel). 	Interview/References
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Job Title: Trainee Scientific Programme Manager

Salary range: £36,860 to £44,508 per annum

Attributes	Essential Criteria	Desirable Criteria	Method of assessment
Qualification Attainments	<ul style="list-style-type: none"> Honours degree (First or Upper Second Class) in Genetics, Biochemistry, Molecular Biology, Biomedical Sciences, Genomic Sciences, or allied subject. Willingness to undertake further training and self-directed learning 	<ul style="list-style-type: none"> Masters or equivalent level of experience in a relevant subject. Demonstrable knowledge and experience in research and/or appropriate publications. Healthcare Science Registration e.g., for healthcare science practitioners / Certificate of Competence (CoC) for Genetic Technologists (GT) or equivalent. 	Application form/interview/ Certificates
Previous Experience	<ul style="list-style-type: none"> Experience in genomic techniques e.g., previous employment, relevant honours/research project or placement 	<ul style="list-style-type: none"> Good practical skills and experience in complex molecular techniques e.g., through employment or research. Experience of Next Generation genomic diagnostic technologies and/or cell free DNA testing. 	Application form/interview/ References
Special Skills & Knowledge	<ul style="list-style-type: none"> Good understanding of genomic diagnostic testing both hereditary and somatic. Ability to analyse problems and evaluate solutions. Ability to gather and assimilate information i.e., literature searches, use of internet and relevant clinical databases. Computer literacy is essential. 	<ul style="list-style-type: none"> Understanding of the specialist theory of external quality assessment (EQA). Project management skills (for example implementing a new service, planning a research project, managing events or a society / club). Understanding of Audit, Appraisal and Risk Management. 	Application form/interview/ References

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	<ul style="list-style-type: none"> Ability to communicate complex information in both verbal and written formats. 	<ul style="list-style-type: none"> Written and spoken knowledge of another language (e.g., French, German, Spanish, Italian). Presentation and educational skills e.g., presenting lectures / seminars or workshops 	
Key Personal Attributes	<ul style="list-style-type: none"> Developed interpersonal skills to enable adequate communication (both written and verbal). Ability to work flexibly within a team but also with minimal supervision. Proven self-motivation and ability to work under pressure. 	<ul style="list-style-type: none"> Ability to work flexibly either as a team member or to be self-motivated, as appropriate. Ability to motivate staff / senior colleagues in own and other institutions and countries (e.g., when leading EQA projects). Willingness to travel (as the role requires some international travel). 	Interview/ References

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