

Principal Clinical Scientist (Molecular Genetics)

GOSH profile

Great Ormond Street Hospital for Children NHS Foundation Trust (GOSH) is an international centre of excellence in child healthcare. GOSH is an acute specialist paediatric hospital with a mission to provide world-class care to children and young people with rare, complex and difficult-to-treat conditions.

Together with our research partner, the UCL Great Ormond Street Institute of Child Health, we form the UK's only academic Biomedical Research Centre specialising in paediatrics.

Since its formation in 1852, the hospital has been dedicated to children's healthcare and to finding new and better ways to treat childhood illnesses.

Great Ormond Street Hospital receives nearly 300,000 patient visits (inpatient admissions or outpatient appointments) every year (figures from 2016/17). Most of the children we care for are referred from other hospitals throughout the UK and overseas. There are 60 nationally recognised clinical specialities at GOSH; the UK's widest range of specialist health services for children on one site. More than half of our patients come from outside London and GOSH is the largest paediatric centre in the UK for services including paediatric intensive care and cardiac surgery.

Through carrying out research with the Institute of Child Health, University of London and international partners, GOSH has developed a number of new clinical treatments and techniques that are used around the world.

The UK's only academic Biomedical Research Centre (BRC) specialising in paediatrics is a collaboration between GOSH and UCL Great Ormond Street Institute of Child Health. We are a member of University College London (UCL) Partners, joining UCL with a number of other hospitals – an alliance for world-class research benefitting patients. In partnership with six other NHS trusts, we are the lead provider for North Thames Genomics Medicine Centre, part of the national 100,000 Genomes Project.

GOSH employs

4,122

hospital staff,
including doctors,
dietitians, nurses,
physiotherapists,
psychologists and
speech and language
therapists.



The UK's widest range
of health services for
children on one site.



The hospital has more than
283,000
patient visits every year.



GOSH has 19
nationally commissioned
services for rare diseases,
the largest number
in any NHS trust.

Job title	Principal Clinical Scientist (Molecular Genetics)
Directorate	North Thames Genomic Laboratory Hub
Band	8b
Responsible to	Head of Service (Molecular Genetics)
Accountable to	Director of Laboratory
Type of contract	Permanent
Hours per week	37.5
Location	Rare & Inherited Disease Laboratory
Budgetary responsibility	N/A
Manages	Direct Management Molecular Genetics Clinical Scientists and / or Pre-Registration scientists.

Trust Values and Expected Behaviours

The Trust has developed the Always Values with our staff, patients and families that characterise all that we do and our behaviours with our patients and families and each other.

Our Always Values are that we are:

- Always Welcoming
- Always Helpful
- Always Expert
- Always One Team

Each value is underpinned by behavioural standards and employees will be expected to display these behaviours at all times.

You can find a full copy of Our Always Values on our intranet.



Scope of the role

As part of NHS England's strategy to establish a national genomics medicine service, building on the 100,000 Genomes Project, which will ensure the NHS fully benefits from advances in genomics, NHSE has commissioned 7 genomic laboratory hubs (GLHs) as part of a national network. The Genomic Medicine Service:

- Addresses variations in genetic testing quality and access across the country
- Enhance the quality of information e.g. the cost and type of tests performed
- Broaden understanding of the causes of disease and the effectiveness of interventions

The London North GLH provides all core Rare Disease and Cancer testing for this area as well as some specialist Rare Disease testing at a sub-national level. Clinicians will be able to order tests via a national test directory and a national Informatics system will support the process from ordering through to reporting. The London North GLH is a partnership between a number of Trusts across North London. Led by Great Ormond Street NHS Foundation Trust the partners include Barts Health, Imperial College Hospital and its partner laboratory North West London Pathology, the Royal Marsden Hospital, UCLH NHS Foundation Trust and the Royal Free Hospital with its partner laboratory Health Services Laboratory, and the Royal National Orthopaedic Hospital.

This hub is led by the Chief Operating Officer, Medical Director and Scientific Director who oversee a management team. One of the objectives for the new Genomic Medicine Service is to streamline laboratory services, consolidating to enable delivery of high throughput testing to drive efficiencies. As such we will be looking to centralise laboratory services. Thus the Hub includes two main laboratories, one for rare disease based at Great Ormond Street NHS Foundation Trust and one for cancer based at the Royal Marsden, with some specialist testing being conducted in partner organisation laboratories.

Based at the Rare & Inherited Disease Laboratory at Great Ormond Street NHS Foundation Trust, the postholder is expected to deliver on their own a range of complex work demanding skilled performance including service developments with or without scientific and/or technical support.

The postholder will manage a section of the laboratory and a large team of up to 15 scientists, (senior, clinical scientists and pre-registration). They play a key support role, heading up a major section of the activity and must maintain strong scientific and technical skills. Designated sections include Specialist Postnatal, Core/Cancer and Specialist Prenatal.

To liaise with the Director, Head of Service and relevant GOSH and ICH clinical and scientific staff, hospital support staff and to deal with enquiries from other hospitals and institutions

To provide support for the laboratory staff ensuring a balance between service provision, research and development and training.

Key working relationships

Internal:

Head of Service (Molecular Genetics)
Head of Service (Cytogenetics)
Rare & Inherited Disease Laboratory Lead
Consultant Clinical Geneticists
Clinical Scientists & Technologists
Great Ormond Street Specialist Consultants
Service Managers
Bioinformaticians

External:

Referring Clinicians national & international
Regional Genetics Centres / Laboratories
Researchers ICH and nationally
GENQA, EMQN
Suppliers, Engineers

Main duties and responsibilities

1. Together with the Head of Service, assume responsibility for the day-to-day running of designated section of the service
2. To deputise in the absence of the Head of Service as required and to have a high level of individual responsibility applied to a variety of situations
3. To play a key role in the preparation for UKAS ISO15189 inspection and maintenance of accreditation
4. To take part in and lead as required, Clinical Audit, Internal Quality Control and External Quality Assessment and other Quality Management activities as directed. To include advising clinicians of the outcomes and recommendations for the improvement of the service arising from such activities
5. To participate and encourage a culture of critical appraisal of service delivery to ensure that the quality of service provided continuously improves
6. To follow established procedures and protocols
7. Comply with health and safety policies
8. Comply with corporate and professional codes of conduct
9. Implement and maintain appropriate quality assurance procedures
10. Accept responsibility for training of new staff or visitors and supervising project work
11. To prepare and to assist in the maintenance and review of operating policies
12. Attend training courses as required
13. Implement and participate in regular audit
14. To undertake an appropriate proportion of the total workload of the department and other duties appropriate to the grade of the post and within appropriate time limits.
15. To be aware of when to seek further advice or refer issues arising to the Head of Service.

Communication and Relationships

1. To generate and interpret results, to calculate risks where necessary, and to produce clear and concise patient reports adhering to sample turnaround times as directed by the Head of Service.
2. To be responsible for the writing and authorisation of normal, abnormal and complex genetic reports.
3. To write concise, interpretive reports of molecular genetic findings with reference to the scientific literature where appropriate for the benefit of patient care. Reports to be written in

the knowledge that they need to be understood by other professionals and may be seen by patients.

4. As a registered Clinical Scientist, apply the knowledge and skills required of a Clinical Scientist including the analysis, interpretation and reporting of genetic findings in order to provide a reliable and high quality clinical service, with minimum supervision.
5. To supply a high level of experience and expertise in molecular genetics including direct clinical liaison with service users where appropriate.
6. To liaise with referring centres, clinicians and staff from other laboratories concerning the suitability and appropriateness of tests offered by the department for a particular referral and the samples required for that test.
7. To inform the Principal Scientist of any adverse or difficult circumstances that may affect case management, results or reporting within the molecular genetics section.
8. To provide supervision and advice to scientific and technical staff booking in samples regarding appropriate tests or combination of tests for particular referral reasons.
9. To provide supervision and trouble-shooting advice to technical staff regarding the processing of samples.
10. To foster and maintain a team spirit within the laboratory, supporting and communicating across sections as required.
11. To represent the laboratory at local, regional, national and international levels as required

Planning and Organisation

1. Together with the Head of Service, to be responsible for the management and day to day organisation of a section of Molecular Genetics including supervision of clinical scientists and technologists for the delivery of a reliable, competitive, efficient, cost effective and high quality clinical diagnostic service.
2. To work closely and effectively with departmental colleagues (molecular genetics, cytogenetics and clinical genetics) to provide high quality training for post-registration, pre-registration and trainee clinical scientists and laboratory technologists required for the delivery of a reliable, competitive, efficient, cost effective and high quality clinical genetic diagnostic service
3. To deputise, provide cross-cover and support other sections of the genetics laboratory service as required
4. To ensure, for their designated section, that cover is provided for staff absence.
5. To work under pressure and maintain a high level of attention to detail and resourcefulness at all times to ensure the delivery of the service in a diagnostic patient-centred working environment

Knowledge, Training and Experience

1. To interpret and apply the correct HGVS nomenclature to the description of variants identified and to apply ACMG/ACGS classification of variants.
2. To check analyses carried out by other members of staff (including staff in training) to ensure compliance with the required standards for analysis and to ensure that other studies have been performed where appropriate and that the interpretation is correct.
3. To provide supervision of pre-registration clinical scientists and trainees in support of their attaining HCPC registration
4. To take part in the training of technical staff and other healthcare professionals where appropriate e.g. through lecture programmes or informal site visits
5. To develop and record an active programme of continuous professional development (CPD) and maintain registration with the appropriate professional body (HealthCare Professions Council)
6. To achieve full fellowship of the Royal College of Pathologists if not already awarded
7. To undertake additional responsibilities as directed by the Head of Service, e.g. Quality Manager, Training Manager

Policies

1. To be responsible for the implementation of relevant policies and procedures according to laboratory documentation and for the review and revision of standard operating procedures as required
2. To be a member of the Quality Management Team consistent with ISO15189 standards.
3. To be responsible for the health and safety of all staff working in the department in conjunction with the Laboratory Health and Safety Officer and Head of Service.
4. To promote a safe and efficient working environment for all technical staff by ensuring that laboratory protocols and standards are adhered to
5. To ensure all documentation relevant to the designated section is up to date and complete including the reporting and review of adverse incidents.
6. To conduct all activity in accordance with GOSH NHS Trust and departmental standard operating procedures, professional guidelines, professional standards and legislative requirements

Human Resources

1. To be responsible for managing staff attendance and performance as appropriate
2. To conduct personal development reviews and oversee personal development plans for staff within constitutional cytogenetics and others as delegated by the Laboratory Director and Head of Service
3. To be responsible for the selection, interview and induction of new members of staff as appropriate
4. To take responsibility for staff recruitment and selection, in accordance with HR policy and processes; chairing interview panels as required

Financial and Physical Resources

1. To be responsible for the evaluation, purchase and maintenance of appropriate equipment for molecular genetics
2. To be responsible for the evaluation and purchase of appropriate reagents for the section
3. Work with the Director, Heads of Service and Service Manager to review on a regular basis the cost effectiveness of the service and identify opportunities for cost-savings and working efficiencies in line with Better Value schemes required by the Trust
4. Work with the Director, Heads of Service and Service Manager, to identify new business and income generating opportunities and develop appropriate business plans

Translational Research and Development

1. Work with the Laboratory Director, Heads of Service, clinical colleagues and senior clinical scientists to develop and implement an effective translational R&D strategy for the genetics laboratory and to obtain peer-reviewed grant funding
2. To develop collaborative projects with fellow professionals at Great Ormond Street Hospital, the UCL Institute of Child Health, UCL Partners and other national and international institutions as appropriate
3. To publish service and research findings in high quality, peer-reviewed journals
4. To present service and research findings at regional, national and international meetings

Other information

Great Ormond Street Hospital for Children NHS Foundation Trust is a dynamic organisation, therefore changes in the core duties and responsibilities of this role may be required from time to time. These guidelines do not constitute a term or condition of employment.

Safeguarding

All Trust staff have a responsibility for safeguarding children, young people and vulnerable adults which includes;

- an understanding of relevant Trust Policies
- ensuring that any safeguarding and child protection or vulnerable adults' concerns are both recognised and acted on appropriately
- Attendance at mandatory safeguarding children & adults training and updates at the competency level appropriate to their role and in accordance with the Trust's safeguarding training guidance.

Confidentiality

On appointment you may be given access to confidential information which must only be disclosed to parties entitled to receive it. Information obtained during the course of employment should not be used for any purpose other than that intended. Unauthorised disclosure of information is a disciplinary offence.

Risk Management

You will be required to ensure that you implement systems and procedures at a local level to fulfil the requirements of the organisation's Risk Management Strategy including local management and resolution of complaints and concerns, management of SUIs/incidents and near misses. Your specific responsibility for risk management will be clarified to you by your manager at your local induction.

Emergency Planning

In accordance with the organisations responsibilities under the Civil Contingencies Act 2004, you may be required to undertake alternative duties as is reasonable directed at alternative locations in the event of and for the duration of a significant internal incident, major incident or flu pandemic.

Human Rights

You are required to comply with the regulations of the Human Rights Act 1998 during the course of your employment.

Sustainable Development

You will be required to demonstrate a personal commitment to the Trust's Sustainable Development Plan and to take personal responsibility for carrying-out your work duties in a way which is compliant with this Plan.

PERSON SPECIFICATION

Evidence for suitability in the role will be measured via a mixture of application form, testing and interview

Essential: **E** Desirable: **D**

Our Always Values

E	Always welcoming – positive, polite, prompt, responsive
E	Always helpful – respectful, supportive, approachable; caring
E	Always expert – Up-to-date knowledge , strive to provide a quality service, proactive
E	Always one team – informative, mindful, appreciative, open, honest

Skills and Abilities

E	Positive, “can do” attitude to work
E	Positive, “can do” attitude to work Evidence of excellent inter-personal communication skills
E	Skilled in data analysis relating to molecular genetic / genomic techniques (including, but not limited to Sanger & Next Generation Sequencing, MLPA) and variant interpretation
E	Skilled in the interpretation and reporting of complex molecular genetics results, including giving advice on the implications and reproductive risks for patients and families
E	Able to critically analyse and interpret scientific data
E	Excellent organisational and time management skills with ability to prioritise tasks effectively

Education, Training and Qualifications

E	1st or 2nd class honours degree in a relevant biological subject
E	State Registered Clinical Scientist (HCPC)
E	Royal College of Pathologists Part 1 / DipRCPath
D	Higher degree or externally assessed equivalent level of knowledge and expertise within the speciality of Clinical Molecular Genetics / Genomics
D	Royal College of Pathologists Fellowship (FRCPath)

Knowledge & Experience

E	To have completed a formal postgraduate training programme approved as appropriate for registration together with substantial supervised in service experience.
E	Extensive post-registration experience in a regional genetics service
E	Extensive and comprehensive knowledge of molecular genetic diagnostic methods required in a regional clinical molecular genetic service
E	Up to date knowledge of scientific literature and best practice guidance relating to molecular genetic tests
E	Knowledge and experience of alternative methods of follow up of microarray findings
E	Experience of training pre-registration clinical scientists

E	Excellent verbal and written presentation and communication skills.
E	Ability to write and authorize normal, abnormal and complex reports
E	Enthusiasm, Ability to motivate staff
E	Self-confident and emotionally resilient.
D	Ability to develop and maintain effective multi-disciplinary working relationships at all levels, particularly during times of change

E	Experience of reporting complex results
E	Evidence of an active programme of continuing professional development
E	Knowledge of appropriate Quality Management and Audit regulations and requirements
D	Experience of molecular genetic techniques and their application within a regional clinical molecular genetic service
D	Experience of participation in external quality assessment schemes for molecular genetic tests
D	Knowledge of appropriate Health and Safety regulations and requirements