

MY LAB

IN GREAT ORMOND STREET HOSPITAL

Specialist Biomedical Scientist **Bamidele Farinre** gives a guided tour of her paediatric lab at the children's hospital.



work in the Department of Microbiology, Virology and Infection Prevention and Control at Great Ormond Street Hospital for Children NHS Foundation Trust (GOSH). At GOSH paediatric laboratory medicine, we offer a wide range of specialised clinical laboratory services. We support the tertiary paediatric services at GOSH and act as a specialist referral centre for hospitals, clinics and clinicians across the world. GOSH also collaborates closely with clinical colleagues and research fellows at the UCL Institute of Child Health.



My department is ISO15189 accredited and provides routine and specialist investigations in bacteriology, virology and molecular diagnostics work, which are required for the diagnosis and management of our paediatric patients.

We are comprised of four consultants and one registrar, clinical scientists, biomedical scientists, medical laboratory assistants and research fellows. It is a team of friendly, highly-skilled technical staff, carrying out appropriate serological, microbiological and molecular investigations on patient samples, such as blood specimens, nasopharyngeal aspirates, swabs, stool samples and CSFs.

The microbiology lab provides a 24-7 service, while the virology lab provides a weekday and weekend out-of-hours service for the prevention, investigation

and control of infection in patients and staff. Workload is prioritised at the beginning of each day, making sure that patient samples, including those marked urgent, are processed in good time and that turnaround times for reporting results are achieved. Owing to the complex nature of our paediatric population, we employ the use of custom equipment and technologies which enable us to test a vast range of biological samples, including very small sample volumes, especially from our patients that are very hard to bleed.

We have consolidated our virology and microbiology molecular diagnostic services to provide a comprehensive service. This has benefited our patient population by increasing our testing repertoire, optimising workflows to

enhance turnaround times and has ultimately led to a surge in workload.

As a department, we are constantly developing new methods for investigation of infection to keep up to date with diagnostic innovations.

This year GOSH Children's Charity funded a research project into a cutting-edge technique called RNAseq that uses deep sequencing of brain tissue to pinpoint the exact viruses and bacteria causing encephalitis helping more patients to get the right treatment.

The success of this research project will enable processing of samples from across the country and Europe. It has the potential to revolutionise how we diagnose encephalitis. GOSH is currently the only place in Europe to provide this service.

A key part of what we do is the expert clinical advice that supports the delivery of results and medical diagnosis. I am very proud to work in the virology department at GOSH and being part of an amazing team; knowing that I have positively contributed to the quality of service we provide, ultimately leading to an improved patient outcome. 

Bamidele Farinre is a Specialist Biomedical Scientist and GOSH Speak-Up Ambassador in the Virology Department at Great Ormond Street Hospital For Children.