

MY LAB

ROTHERHAM BIOCHEMISTRY DEPARTMENT

Senior Biomedical Scientist and Pathology Research Coordinator
Holly Neill gives a guided tour of her laboratory.

The biochemistry laboratory at The Rotherham NHS Foundation Trust (TRFT) is part of the joint pathology partnership with Barnsley Hospital NHS Foundation Trust – Barnsley and Rotherham Integrated Laboratory Services (BRILS). As a combined pathology service, we serve a population of over 500,000 across both Barnsley and Rotherham.

At Rotherham we are a fairly small team that provides services predominantly to hospital patients, as well as some specialist referral work from other laboratories across the country. We work together with haematology and immunology to form a blood sciences department, analysing approximately 2000 samples per day across all disciplines. Our hard-working teams across blood sciences range from consultants and biomedical scientists, to medical laboratory assistants and clerical staff; all have a vital role in the smooth running of the laboratory and aim to provide a high-quality service.

The biochemistry department has two main sections: automation and specialist chemistry. The automation section is where the bulk of our work goes, analysing various samples from around the hospital on our automated chemistry and immunoassay analysers, 24 hours a day, seven days a week.



Much of our urgent work comes from our newly built Urgent and Emergency Care Centre, which provides a number of services to ensure patients access the most appropriate treatment. We have just introduced a new high-sensitivity troponin-I assay, which aims to increase patient discharge safely from A&E, as well as decrease admissions and the amount of time patients spend in hospital waiting on serial results. Our new pathway can admit or discharge on the first sample and a second sample can be taken at one hour, if required, instead of six. This allows for more timely patient management and care. We also process routine work from other wards and small amounts of GP work, the bulk of which goes to Barnsley Hospital.

Our specialist chemistry section uses HPLC to measure vitamins A, E, B1 B₆ and C by UV and fluorometric detection, as well as electrochemical detection

for catecholamines, metanephrines, VMA and 5HIAA analysis in urine. Staff rotate through both sections and the immunology department, providing them with a range of practical and analytical skills as well as developing their knowledge in different areas.

The biochemistry laboratory at TRFT has worked hard to become fully UKAS ISO:15189 accredited, with our first surveillance visit this January.

We are accredited for Registration and Specialist Portfolio training and have several people undergoing their IBMS Specialist Portfolios and a student from Sheffield Hallam University starting with us in September to complete their IBMS Registration Portfolio. We believe that investing the time in staff and students not only helps them to grow and develop in the laboratory, but will also encourage them to stay within the profession and be enthusiastic about their job. We are also passionate about CPD and have monthly tutorials and “Cases and Cakes”, where we discuss interesting cases and get to eat some cake over lunch time.

Our hope for the future is to continue to develop and improve our service by recruiting more staff, investing in innovative new technology and promoting the vital work that all pathology laboratories provide in order to deliver the best patient care to the communities in our area. 