

MY LAB

RED CELL IMMUNOHAEMATOLOGY

Specialist Biomedical Scientist **Helen Owens** gives a guided tour of her reference laboratory at NHS Blood and Transplant, Newcastle.



Just a stone's throw from St James' park, lies the red cell immunohaematology (RCI) laboratory at NHS Blood and Transplant (NHSBT), Newcastle, providing a comprehensive reference service for the investigation of blood grouping and red cell antibody problems.

With a small team of 11, consisting of the Head of Laboratory, Laboratory Manager, two support staff, and seven biomedical scientist staff (six of whom participate in the out-of-hours on-call rota) we provide a 365-day, 24/7 service for 15 hospital transfusion laboratories across the North of England.

Accredited to ISO 15189 by the United Kingdom Accreditation Service (UKAS) and licensed by the Medicines and Healthcare Products Regulatory Agency (MHRA), the Newcastle laboratory is split into three sections: sample reception, manual serology and antibody quantification, with biomedical science staff rotating between sections.

Samples are booked in throughout the day and the workload prioritised to meet urgent requests. The majority of requests

are processed manually, due to the complex nature of our work. Reference services include serological investigations and crossmatching for atypical red cell antibodies, red cell phenotyping and genotyping, haemolytic transfusion reaction investigations, routine and anomalous ABO and RhD typing, titration of anti-A and anti-B for ABO incompatible renal transplants and autoimmune haemolytic anaemia (AIHA) investigations.


We have multiple tools at our disposal, including access to numerous reagent panels, including a rare cell panel, alloadsorption cells and a wide range of anti-sera. Antenatal services include investigations for the prevention of haemolytic disease of the fetus and newborn (HDFN), antibody quantification for alloanti-D and alloanti-c, antibody titration and paternal phenotyping.

As a laboratory that prides itself on training, we support a wide array of trainees, from placement students to trainee specialist registrars. Four of our current staff, including myself, were placement students in RCI who completed their HCPC registration portfolios during their clinical placement

year while at university. We accommodate students undertaking the NHS Practitioner and Scientist Training Programmes. All staff enjoy sharing their knowledge and experiences with others, participating in training and are also actively involved in supporting courses run by NHSBT for hospital transfusion staff and work closely with local universities, with staff running practical sessions and delivering lectures for transfusion science modules.

We also provide laboratory tours for schools, blood donors, hospital staff and non-scientific NHSBT staff. We recently had our first Harvey's Gang event, which was a huge success, and are looking forward to more of these in the future.

As well as offering training for external staff and students, NHSBT is committed to training and developing its own staff. At RCI Newcastle, our current placement student has just completed her registration portfolio, two staff have recently started their specialist qualifications, one is undertaking an MSc, and another is due to start in September.

Myself and one of the Advanced Specialists, have successfully completed the IBMS Higher Specialist Diploma in Transfusion science in 2018 and 2017, respectively, and the Reference Section Head is following the NHS Higher Specialist Scientist Training pathway. The staff are passionate about training and development, and it is this passion and drive which ultimately provides the best care for our patients. 

Helen was awarded the **The R J Lavington Prize**, as the IBMS member who achieved the highest mark across all disciplines in the IBMS Higher Specialist Diploma exams.