

MY LAB

MICROBIOLOGY'S ONE-STOP-SHOP

Daniel Weiland, Consultant Microbiologist and Educational Lead, gives a guided tour of his laboratory in Newcastle.

The Newcastle upon Tyne Hospitals NHS Foundation Trust is one of the most successful teaching NHS trusts in the country. The trust is one of just five in the country to have twice been rated “outstanding” by the Care Quality Commission. In the most recent NHS Friends and Family Test, around 98% of our in-patients said they would recommend our services.

Laboratory medicine at The Newcastle upon Tyne Hospitals NHS Foundation is based over three sites – the Royal Victoria Infirmary (RVI); the Freeman Hospital; and the Centre for Life – and carries out over 16 million tests each year. All laboratories are compliant with, and accredited by, the HTA, MHRA and UKAS.

Newcastle microbiology services, based at the Freeman Hospital, provides one of the most comprehensive test portfolios in the UK – a one-stop-shop for most available microbiology and virology tests, including bacteriology, serology, mycology and parasitology. The diagnostic portfolio is further bolstered by the regional centre for mycobacteria and a comprehensive molecular diagnostics suite. The laboratory has consistently achieved ISO 15189 accreditation, and its 86 scientific and technical staff process approximately 1,120,000 samples per




annum. The total annual budget for the department is in excess of £6m.

Scientific and technical staff are supported by eight substantive microbiology consultants and three virology consultants. The department also has a strong track record of furthering medical education, supporting eight registrar-grade infection specialty doctors, as well as foundation year, core medical training, paediatric ID/immunology, and sexual health/genitourinary medicine doctors.

Working closely together with Newcastle University, the University of Northumbria and the National Institute of Health Research, the trust forms a key part of one of Europe’s leading centres for research and innovation. Led by Professor John Perry, the microbiology research team continues to play a key role in

numerous, high-impact studies. For example, in-house research has led to the development of solid media for the detection of rapidly growing mycobacteria, which has transformed the diagnosis and management of cystic fibrosis and other respiratory diseases. This media has been adopted by a commercial manufacturer to be used globally. The team has also developed a method for combination antibiotic susceptibility testing, which is used to inform patient management in the most complicated cases of

antimicrobial resistance, across the UK and Ireland. In 2018, Newcastle microbiology services successfully published 24 manuscripts in peer-reviewed journals and delivered 35 conference presentations.

At this year’s Institute of Biomedical Science Congress, speakers from Newcastle microbiology services are giving presentations on topics including: demand management through SMART testing; abdominal solid organ transplant perfusion fluid culture; and pathogens in bone marrow transplant recipients. 

Jennifer Collins is the Laboratory Manager and the Operational Services Manager is Kim Young. The Head of Department is **Dr Julie Samuel**. For more information visit careers.nuth.nhs.uk; on twitter @NewcastleHosp; and on facebook.com/NewcastleHosp.