

## MY LAB

# AWARD-WINNING MICROBIOLOGY LAB

Professional Manager for Quality and Training, **Mairiead MacLennan**, gives a guided tour of her microbiology lab in Fife, Scotland.



**N**HS Fife serves the people of the county of Fife, a peninsula between the firths of Tay and Forth, still known as the Kingdom of Fife from when it was an historical seat of Pictish Kings. The laboratory services are centralised in the town of Kirkcaldy, one of the four main towns in Fife. The other three being Dunfermline in the west, Glenrothes centrally and the best known across the world, St Andrews on the north-east coast of Fife.

The county has approximately 370,000 residents and is one of the geographically smallest health board areas of Scotland. The main acute services, which include laboratory services, are delivered from the newly built, extended district general, Victoria Hospital. In 2012 the site more than doubled in size and a new laboratory was built with the intention of rationalising all disciplines under one roof

and extending floor space to accommodate an automated blood sciences service.

The original plan, for a modular build with Blood Sciences on the ground floor and Cell Sciences (Microbiology and Infection Control and Cell Pathology) on the second floor, did not go according to plan. Although Blood Sciences is fully functional with a fully-automated track, the second floor was not built and Cell Sciences remains in the old building, having had some refurbishment.

The plan still is to eventually have one building, but in the meantime we have the new “South Laboratory” and the old renamed “North Laboratory” separated by a large car park – this means that we have to work constantly to address resultant logistical problems.

Nonetheless, despite obvious problems with the aged building, my department has achieved amazing successes, particularly in recent years. We have not only embraced new developments, but

have also driven advances. From the installation of an automated plate organisation platform in 2009 (unusual for a department of our size) and the phased repatriation from the large central laboratories in Edinburgh and Glasgow and local introduction of molecular testing, to research partnerships with the University of St Andrews, we have demonstrated how we can push boundaries.

Our team comprises four Microbiology Consultants, six Senior Specialist and 16 Specialist Biomedical Scientists, two Medical Secretaries, 10 Clinical Support Workers and four Managers. We deliver a 24-7 service, performing almost 300,000 tests per year, with up-to-date bacteriology techniques, recognised expertise in antimicrobial resistance monitoring and antibiotic stewardship, top-quality containment level 3 facilities and an impressive repertoire of molecular testing, with recent innovative consolidation to a single-platform solution.

Recently, the department was awarded the Scottish Government Advancing Health Care Award for driving improvement, delivering results. The award was for our speedy and highly effective implementation of a near-patient molecular flu testing system in the emergency department, during a time of urgent need, helping to avert a patient management crisis, in the severe flu outbreak this past winter.

The skills, experience and “can-do” attitude of the whole department was typified by this discreet project. We are proud of each other as individuals and of our team. 