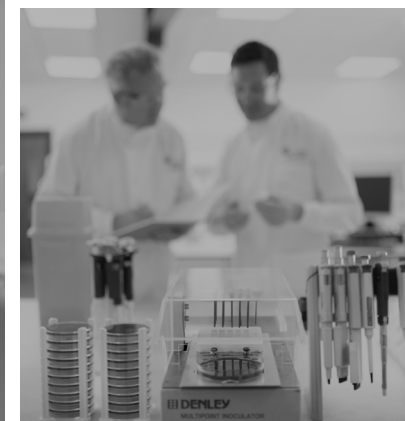
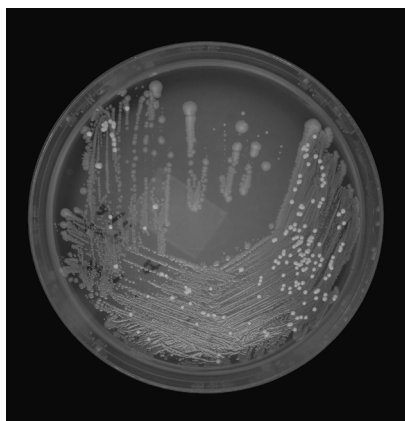
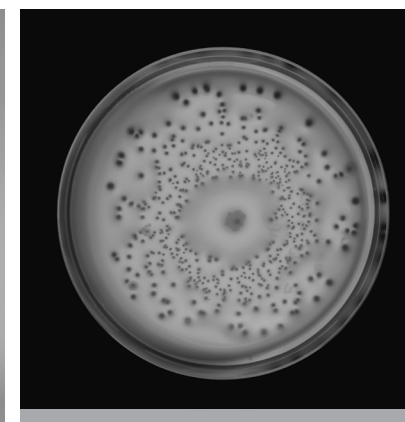


Contract Laboratory Services



01 | Our Credentials

Because his early career had been as a 'working-at-the-bench' microbiologist, Don Whitley set out to improve the microbiologist's working life by removing as much tedium as he could and by seeking to reduce the risk of tests being compromised by human error.

Don's laboratory experience helped him to develop novel ideas through the use of labour-saving equipment and automated solutions, leading to the formation of Don Whitley Scientific Limited in 1976. Don's first product was an improved anaerobic jar. His work resulted in a stream of innovations in the early years – and a number of products incorporating his inventions are still in production today. We have now sold thousands of anaerobic and hypoxic workstations in over 50 countries and have a worldwide network of distributors.

The publication, *"An Introduction to Clinical Anaerobic Bacteriology"*, is a guide to enable the reader to isolate and identify 12 commonly occurring clinically important anaerobic bacteria. Considerable expert knowledge was combined to make this the most up-to-date reference guide for the modern clinical laboratory including a significant contribution from Don. Some of the images were kindly supplied by the Anaerobe Reference Unit, Cardiff.

Our microbiology began operation in the late 1980s, has been GLP compliant since 1994 and was completely rebuilt on our new site in 2018. We perform studies in diverse areas of microbiology but specialize in evaluating antimicrobial agents, including susceptibility testing of anaerobic bacteria and other organisms with fastidious growth requirements.





03 | DWS Contract Microbiology Laboratories

The type of work that we can accommodate encompasses the whole spectrum of microbiology, from routine analysis/quality control to substantial research and development programmes for major multinational pharmaceutical companies.

One particular area of expertise is antimicrobial drug development, including human food safety of antibiotic residues. We are experienced in both traditional and novel techniques, and pride ourselves in adhering to agreed deadlines and budgets.

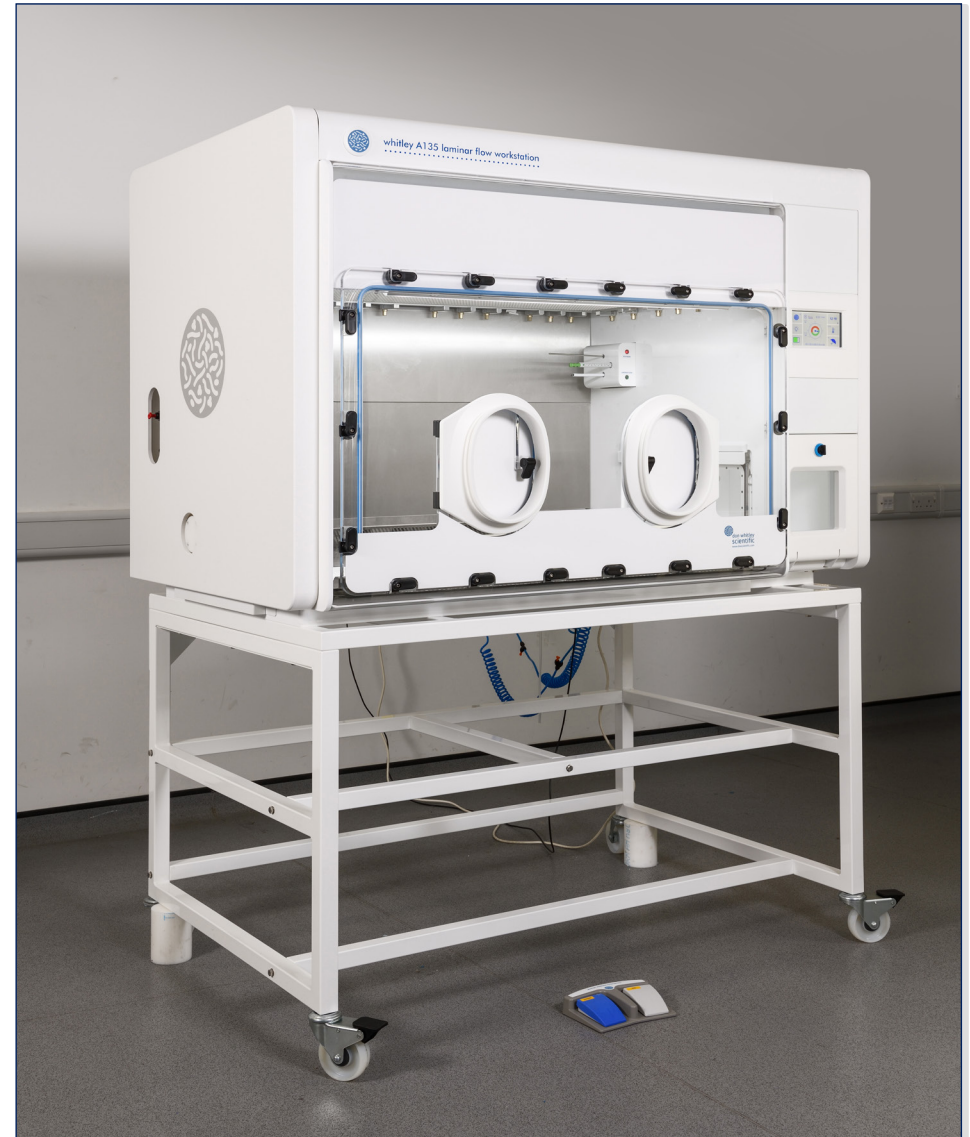
Our team of microbiologists have experience in industrial, pharmaceutical and clinical areas. We operate from purpose-built laboratories in West Yorkshire but work for customers all over the world.

Reflecting DWS's product range, we have the skills and equipment to culture diverse aerobic, anaerobic and microaerophilic bacteria. We specialize in cultivating fastidious organisms such as *Mycoplasma* and *Brachyspira* species, and conducting antimicrobial susceptibility tests with these organisms.

More recently, we have developed and improved procedures for working with specific bacterial strains originating from the normal healthy human microbiota, which are being developed as live biotherapeutic products to treat a range of diseases. We are able to offer quality control (eg. viable counts) and antimicrobial susceptibility testing of such strains, some of which have very specific growth requirements.

We are also on hand to help customers with the best practice, most productive ways of using DWS products.

Quality Standards: In addition to our membership of the UK GLP compliance program, we are able to comply with national and international standards as required, including BS / EN / ISO / ASTM test methods, BSAC, EUCAST and CLSI guidelines. We also welcome QA audits from existing and potential customers.



The Services That We Offer

04

Minimal Inhibitory Concentration (MIC)
Minimal Bactericidal Concentration (MBC)
Antifungal susceptibility testing

Antimicrobial kill curves

Antimicrobial susceptibility testing of fastidious veterinary pathogens (*Mycoplasma spp.*, *Brachyspira spp.*, *Actinobacillus pleuropneumoniae*)

Determination of post-antibiotic effect

Culture / enumeration / susceptibility testing of live biotherapeutic products / candidate strains for LBP development

In vitro efficacy testing of antimicrobial wound dressings

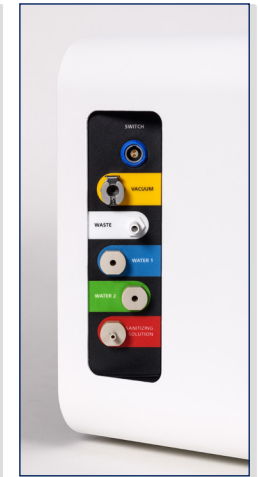
Microbiological assays

05 | Research & Development

One of the strengths of the company as a manufacturer of scientific equipment is having the resource of a working laboratory on site. It's not every laboratory equipment manufacturer that has its own in-house, GLP compliant laboratory with experience in food, water, environmental, pharmaceutical and clinical work.

Not only can our laboratory team provide invaluable, practical insight and scientific knowledge for product development but we can also assist with the whole design process. Our laboratory also puts any product that DWS develops through an intense period of testing.

This is where our own laboratories are key to providing accurate assessment in a real world scenario. In this way, we also become fully conversant with all DWS products. Our laboratory is therefore available as an additional resource to any of our customers needing advice.





07

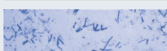
Scientific Educational Resources

Anaerobic sample leaflet

DWS has produced this leaflet, in conjunction with Selina Scotford of the UK Anaerobe Reference Unit, to help improve the way that clinicians collect and transport samples for isolation of anaerobic bacteria.

This guide is entitled Optimising Specimen Collection and Transportation for Isolation of Anaerobic Bacteria and sets out the preferred specimen types for successful isolation of anaerobes; how best to transport specimens to the laboratory and what type of specimen is not routinely cultured for anaerobes. It is available free to any UK address.

Optimising Specimen Collection and Transportation for Isolation of Anaerobic Bacteria
Guidance for Clinicians



Selina Scotford BSc, MBMS
Specialist Biomedical Scientist
UK Anaerobe Reference Unit

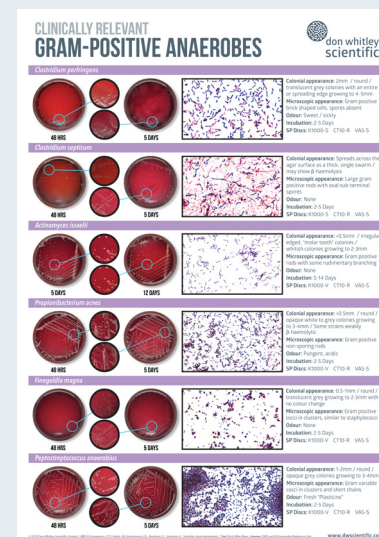
An Introduction to Clinical Anaerobic Bacteriology

This publication is a guide to assist in the isolation and identification of 12 commonly occurring clinically important anaerobic bacteria. It contains 60 pages and is printed in two versions: one is spiral bound, on waterproof, tear-resistant synthetic paper to withstand regular use at the bench and one on normal paper ideal for use in the laboratory library. The publication, written by Professor Michael W D Wren, MBE FIBMS and edited by DWS, is illustrated with stunningly detailed colour photographs and attractive reference tables.



Anaerobe Posters:

DWS has developed two detailed posters, ideal for any microbiology laboratory or for teaching purposes. One details common clinical gram negative anaerobes and the other gram positive. These are available free of charge on request to any UK laboratory.



Practical and Clinical Microbiology of Anaerobes Course

This annual two day residential course is delivered by the UK Anaerobe Reference Unit, Public Health Wales, Cardiff. We assist with the administration of the course, which provides an understanding and awareness of anaerobic bacteria in clinical material; an insight into their relevance in clinical microbiology; a basic level of competence in methods used for their isolation and identification; and to improve the standards of anaerobic microbiology in clinical laboratories. The course has been extremely successful and has been fully booked since its inception. It provides invaluable preparation for FRCPath and is CPD accredited for 11 credits.



Whitley Workstation Travel Grants

For customers using Whitley Workstations in their work, there is the opportunity to apply for a travel grant to present their papers at conferences/events. Applicants could be entitled to £250 if they are able to satisfy a few simple requirements. We can even help promote the work via our social media networks, blog and ebulletins.



Whitley Hypoxia Symposium

These events take place at the Don Whitley Scientific headquarters in Bingley, West Yorkshire. The format is a one day annual symposium designed to bring together hypoxia users to drive interdisciplinary discussions. We are also able to provide a facilities tour and product training on Hypoxystations and other cell culture equipment. Because our aim is to aid and facilitate research in hypoxia, we do not charge a registration fee but the number of places available is limited to a maximum of 50.





What Can We Do For You? | 10



QUALITY COUNTS SCHEME

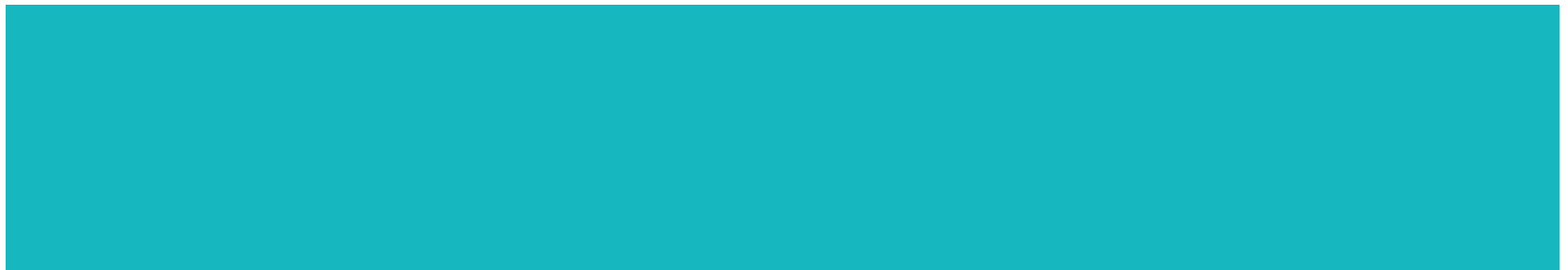
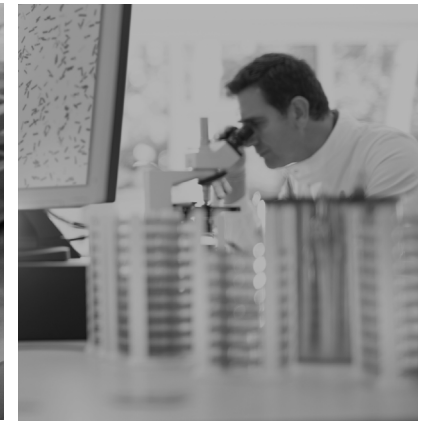
When you purchase a WASP Touch, you can join our Quality Counts Scheme. Free of charge for the first 12 months, this programme provides valuable assurance that your WASP is functioning correctly and that samples are analysed accurately.

If you choose to continue your subscription after the first year, discounts are available for organisations wishing to include more than one WASP Touch within the scheme.

Please contact us for more information.

Please note:

This scheme is only available to customers in the UK and Europe.



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