

COVID-19 – The Infection Challenging the World: a commercial preview

The Annual Scientific Conference hosted by the British Society for Microbial Technology has been the beneficiary of support and sponsorship from a range of relevant companies. With this year's event being held virtually over four days, the following commercial colleagues have grasped the opportunity to be associated with this important series of webinars.

Alpha Laboratories

Throughout the pandemic, Alpha Laboratories has been supplying a range of swabs and transport tubes to help facilitate testing demands. The company has also provided expertise and supplies to support compliant specimen transport.

Once a swab sample has been collected there are strict guidelines regarding how it should be packaged for transport to the laboratory. This must be in accordance with UN3373 regulations, which require the use of primary, secondary and tertiary packaging materials to provide a triple layer compliant system.

Alpha offers an extensive range of



A complete packaging solution from Alpha Laboratories.



The AltoStar platform from Altona Diagnostics.

sample packaging components and for added convenience the complete sample transport kits, such as the popular RF95-LL1, including absorbent 95-kPa pouch, security seal and the rigid outer box with regulatory markings. Additional specimen bags are also provided

For transporting large numbers of samples, the Alpha range of UN3373 Medical Sample Carriers is a popular choice with medical couriers and for hospital transport.

www.UN3373.co.uk

Altona Diagnostics

Altona Diagnostics is focused on bringing to market high-quality molecular test systems for the detection and

quantification of a broad range of infectious disease pathogens.

The AltoStar platform enables an advanced 'sample to result' CE/IVD-R automated workflow for RT-PCR testing with minimal hands-on time. AltoStar assays include HIV, HCV, HBV, HEV, CMV, EBV, adenovirus, BKV, JCV, HSV, VZV, parvovirus, HHV6, a-Herpes, influenza and SARS CoV-2.

The new complementary FlexStar product range brings a novel approach to syndromic testing, allowing the customer to define their own multiplex testing panel. In addition, the well-known and trusted RealStar infectious disease assay range, which offers a common protocol and is validated for use on a broad variety of RT-PCR instrumentation, has been designed to offer users complete confidence in the validity of results.

www.altona-diagnostics.com

BD Integrated Diagnostic Solutions

BD Integrated Diagnostic Solutions (IDS) provides solutions from collection to results, to drive impactful outcomes in patient and healthcare worker safety through reducing diagnostic errors, improving efficiency and integrated diagnostic stewardship.

BD IDS focuses on integrated specimen management, microbiology



The portable BD Veritor Plus system.

solutions, STI and cervical cancer screening, and COVID-19 diagnostic solutions. When it comes to strategies implemented to contain the spread of SARS-CoV-2, the ability to identify infected patients rapidly is crucial. BD offers a range of solutions from collection to result for coronavirus testing needs, including swabs, tubes and needles for specimen collection, and antigen and molecular tests for detection.

The BD Veritor Plus system is the portable, easy-to-use rapid testing system that allows users to provide patients with reliable results for SARS-CoV-2, Flu A+B, Group A Strep and RSV in just minutes. Furthermore, BD MAX System PCR detection delivers results in two to three hours.

BDdiagnosticsUKI@bd.com



Screen for fungal diseases with BioConnections.

BioConnections

COVID-19 infections present a significant risk of secondary infection, as seen in emerging reports of a link between COVID-19 and fungal co-infections such as aspergillosis. Fungal co-infections are a severe threat to patients already weakened by COVID-19 infection. These fungal co-infections need to be identified rapidly for antifungal therapy to be successful.

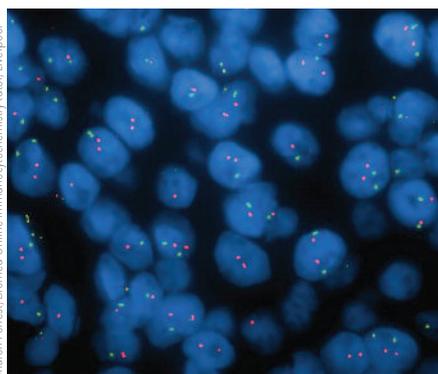
Invasive fungal infections can be challenging to identify. Bringing fungal diagnostics in-house can lead to a significant reduction in result reporting turnaround time. BioConnections is introducing a range of products to UK clinical laboratories for the rapid detection of various biomarkers used to screen for fungal diseases, and, when combined with the Merlin Micronaut antifungal susceptibility testing system, enables rapid targeted patient care.

More information on these new products is available from BioConnections through a virtual presentation.

www.bioconnections.net

Biomed Online

Biomed Online offers a well-established suite of short courses delivered over 12 weeks for the continuing professional development of biomedical scientists



HER2 fluorescence *in situ* hybridisation in a case of invasive breast cancer – Biomed Online learning.

and workplace practitioners. A wide range of topics in pathology-related areas is available and different course combinations can also be selected for qualifications leading to MSc, PG Dip or PG Cert awards.

Each course has been tailored specifically by healthcare specialists to suit workforce needs, and each is delivered online, fully supported by specialist tutors in small groups of around 10 students. Using password-protected learning environments, Biomed Online offers a safe, structured learning environment where participants will also be able to share their experience of pathology in practice with colleagues. Healthcare organisations in partnership with the University of Greenwich manage the courses.

Biomed Online tutors over 700 students per annum, with a >90% pass rate.

www.biomedonline.co.uk

bioMérieux

The COVID-19 pandemic is an ongoing, unprecedented global health challenge. bioMérieux is proud to be part of the global response, having developed three



The BIOFIRE FILMARRAY system from bioMérieux.

of the first commercially available diagnostic tests for SARS-CoV-2, along with additional critical tests for COVID-19 patient management.

The SARS-CoV-2 R-GENE assay is a real-time PCR kit for the detection of SARS-CoV-2. The new BIOFIRE FILMARRAY Respiratory 2.1 Plus Panel enables rapid and accurate automated detection of pathogens behind respiratory infections. It tests for 19 viruses including SARS-CoV-2, and four bacteria that cause respiratory tract infections in 45 minutes. Individual VIDAS SARS-CoV-2 IgG and IgM antibody assays complement the company's PCR solutions.

Every COVID-19 patient comes with a unique profile and experiences the disease differently. Patient management means asking the right questions, finding the right answers and providing appropriate care on the entire length of the patient pathway.

www.biomerieux.com



The MALDI Biotyper from Bruker.

Bruker

As a result of the global SARS-CoV-2 pandemic, clinical microbiology laboratories are facing a significantly increased workload. On top of the requirement to test for the virus itself, patients who are critically ill with COVID-19 are susceptible to secondary bacterial infections, which may even escalate to sepsis.

Bruker's MALDI Biotyper can be implemented with the MBT Sepsityper IVD Kit, enabling reliable species identification directly from positive blood cultures in 15-20 minutes.

"The Sepsityper solution has revolutionised diagnostic microbiology in our laboratory. With rapid identification of a blood culture flagging positive, we are able to change treatment and management properly, escalating or de-escalating as appropriate. Reducing

the time to identification means we are able to improve patient outcomes dramatically, and the Sepsityper has not only improved clinical outcomes but diagnostic practice as well," says Francis Yongblah, Laboratory Manager and HSST Clinical Scientist.

www.bruker.com



GeneXpert Xpress from Cepheid.

Cepheid

Over a decade ago, Cepheid set the standard for innovation in automated molecular diagnostics — and the company has never looked back.

The GeneXpert System has been heralded as game-changing by healthcare leaders across the globe, enabling institutions of any size, from small medical clinics to high-volume reference laboratories and hospitals, to access the speed and accuracy of molecular diagnostics.

Cepheid's growing Xpert test menu spans multiple clinical applications including healthcare-associated infections, sexual health, critical infectious disease, virology and oncology.

www.cepheid.com

Don Whitley Scientific

Don Whitley Scientific is best known within laboratory circles for its range of modified atmosphere workstations and spiral platers. In addition to this legacy,



The UniVerse, now distributed through Don Whitley Scientific.

the company is well-established in its work with international partners to distribute a variety of automated laboratory solutions.

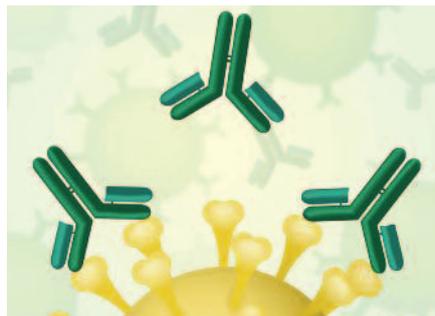
One example of this is COPAN's newly launched UniVerse, a high-throughput system capable of de-capping, re-capping, pipetting and aliquoting from primary tube to secondary tube (or deep-well plates) prior to molecular diagnostic testing.

As the name suggests, UniVerse offers a universal response to some of the most critical challenges faced by today's clinical laboratories. Paring perfectly with every downstream molecular biology platform, it ensures the safety of operators, eliminates human error, provides rigorous traceability, and increases productivity.

A wide variety of assays can be accommodated including respiratory, gastrointestinal, hospital-acquired infections, SARS-CoV-2, HPV and STI screening.

sales@dwscientific.co.uk

www.dwscientific.com/lab-automation



Immune response to SARS-CoV-2 infection or vaccination; a trio of tests from EUROIMMUN.

EUROIMMUN UK

EUROIMMUN UK supplies the healthcare industry with medical diagnostic products in the principal areas of autoimmunity, infectious diseases and allergy.

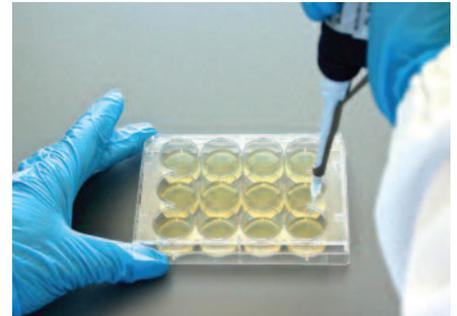
EUROIMMUN UK is the British subsidiary of the EUROIMMUN group, a manufacturer of medical laboratory diagnostic products. EUROIMMUN was one of the first companies in the world to offer a comprehensive panel of SARS-CoV-2 tests, validated for *in vitro* diagnostic purposes.

Tests offered by EUROIMMUN include direct detection methods and highly accurate indirect detection methods to assess the immune response following SARS-CoV-2 infection or vaccination. The latest assays developed by the company are the Anti-SARS-CoV-2 QuantiVac (IgG), the SARS-CoV-2 NeutralISA and the SARS-CoV-2 IGRA.

EUROIMMUN UK has supported public health bodies in establishing a serology assay for use in the National Testing Strategy since March 2020, especially for

the serosurveillance study, the results of which have informed the UK government's strategy to combat the pandemic.

www.euroimmun.co.uk



Launch Diagnostics supplies high-quality diagnostic reagents, instruments and services.

Launch Diagnostics

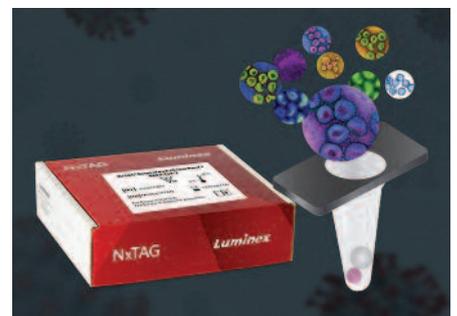
Launch Diagnostics has been a supplier of diagnostic innovation for more than 30 years, providing strategic solutions for the microbiology laboratory.

Partnering with world-leading manufacturers, Launch supplies high-quality diagnostic reagents, instruments and services to the health service pathology departments throughout the UK, Ireland and Europe.

Launch continually aims to introduce the latest instruments and assays, such as offering a total portfolio of COVID-19 diagnostics, from molecular to rapid tests, plus molecular controls. In addition, the company recently launched the Curian from Meridian Bioscience, a fluorescent test analyser.

Liofilchem's range of antibiotic resistance tests is currently expanding, with new antibiotics being introduced and new innovative agar and broth dilution panels for easy test set-up and interpretation.

www.launchdiagnostics.com



Comprehensive respiratory pathogen detection from Luminex.

Luminex

Whatever the testing algorithm required, Luminex has something to offer.

Processing up to 96 samples in under three hours post-extraction, the NxTAG Respiratory Pathogen Panel + SARS-CoV-2 detects 23 pathogens in a single well

including SARS-CoV-2. For a more targeted approach to testing with minimal hands-on time and results within two hours, then ARIES may be better suited. In addition to the ARIES SARS-CoV-2 assay, Luminex offers many other tests. Additionally, you can run laboratory-developed tests with the help of Exo+ Ready Mix and Extraction Cassettes

Luminex is about to launch its combined ARIES SARS-CoV-2, Flu A/B and RSV assay, which simultaneously detects these important respiratory pathogens in a simplified sample-to-result format.

The latest addition to the COVID-19 testing line-up detects 20 viral pathogens, including SARS-CoV-2, and three bacterial pathogens in a single well. Using the proven NxTAG and MAGPIX technology, it is possible to process up to 96 extracted nucleic acid samples in under three hours, with just one pipetting step.

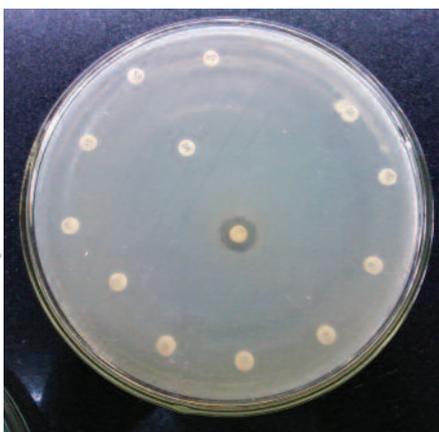
www.luminexcorp.com

Mast Group

Mast Group is a UK-based independent European manufacturer and supplier of clinical diagnostic products. Established in Liverpool in 1957, Mast Group has grown into a multinational company exporting globally. The corporate headquarters are based in Bootle and Mast has subsidiary companies in Reinfeld (Mast Diagnostica) and Amiens, France (Mast Diagnostic).

Mast Group were among the first companies to commercialise the antibiotic disc, and continues to work with major pharmaceutical companies worldwide in the development of new products.

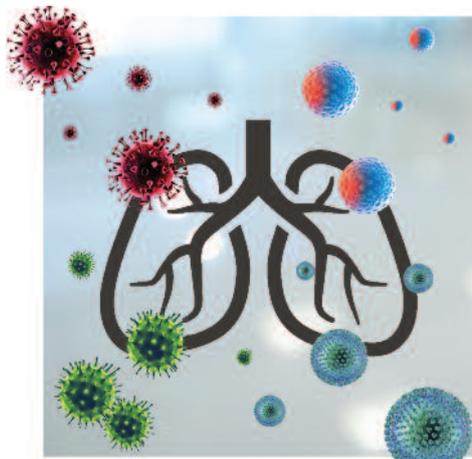
Mast Group focuses on the susceptibility, identification and resistance along with offering molecular and immunochemistry solutions for the IVD market. This is achieved through the investment in personnel, R&D and infrastructure, including state-of-the-art manufacturing facilities on Merseyside.



Antimicrobial resistance detection expertise from Mast Group.

This enables Mast Group to provide tools to aid in the diagnosis of clinical disease, from pioneering antibiotic susceptibility testing to novel molecular solutions, Mast Group continues to develop products for the ever-changing IVD market, creating solutions to support clinical diagnosis today and into the future.

www.mast-group.com



Molecular diagnostics from Mobidiag.

Mobidiag

Mobidiag develops and markets molecular diagnostics for gastrointestinal infections, antimicrobial resistance management, healthcare-associated infections and respiratory infections (including COVID-19). The company aims to provide a global solution to clinicians, suited for their own laboratory needs and capacities.

Following the COVID-19 crisis, Mobidiag has harnessed its existing technologies and expertise to develop and supply coronavirus molecular diagnostic tests. In addition to targeted tests for COVID-19, it is now offering RESP-4 multiplex panels, which are highly relevant to both the traditional influenza season and COVID-19.

Symptoms caused by most common winter season viruses (SARS-CoV-2, Influenza A, Influenza B and RSV) can be very similar, and it is imperative that healthcare professionals are able to distinguish between them rapidly, in order to start the appropriate treatment. Amplidiag RESP-4 (for batch testing) and Novodiag RESP-4 (for on-demand testing) are now available.

www.mobidiag.com

MWE

Recently, Nadine Dorries, Minister of State for Mental Health, Suicide Prevention and Patient Safety, reinforced the importance of following the Royal College of Obstetricians and Gynaecologists (RCOG) guidelines on the prevention of, and



Selective enrichment broth and swab from MWE.

treatment for, group B *Streptococcus* (GBS) to ensure the best outcome both for mothers and babies.

The RCOG recommendation states that a gold-standard Enriched Culture Medium swab test should be used as it is proven that, without using a selective enrichment broth, up to 50% of women who are GBS-positive have false-negative culture results.

Prevention of early-onset GBS infections would benefit from improved detection methods by optimising specimen collection and processing procedures. MWE developed Sigma GBS, a selective enrichment broth, complete with swab, designed for isolation of GBS from pregnant women, to tackle the issue of false negatives, offering patients accurate results, saving lives and improving outcomes.

www.mwe.co.uk

National Collection of Type Cultures

The National Collection of Type Cultures (NCTC) is one of four Culture Collections operated by Public Health England. NCTC is the longest-established collection of its type and entered its centenary year in 2020. The collection holds over 6000 type and reference bacterial strains of medical, scientific and veterinary importance. The strains support academic, health, food and veterinary institutions and are used in microbiology laboratories and research institutes worldwide. All strains are available in a freeze-dried format and DNA from over 100 strains is also available.

In 2020, NCTC accessioned over 175 new strains into the collection from all over world. These included 79 newly described type strains, strains of recently described taxa, novel bacteriophage, control strains and recently circulating clinical strains. NCTC is a unique resource



The National Collection of Type Cultures collection holds over 6000 type and reference bacterial strains.

Microscopio - commons.wikimedia.org - CC BY-SA 4.0

and its remit over the past 100 years has remained largely unchanged: to provide a trustworthy source of authentic bacterial strains for use in scientific studies.

www.phe-culturecollections.org.uk/NCTC



An update and new venture from Pro-Lab Diagnostics.

Pro-Lab Diagnostics

Pro-Lab Diagnostics is pleased to continue its support of BSMT. It will be strange not being able to actually meet with our friends and colleagues during these unprecedented times during the pandemic.

The company will provide an update on its core products and work over the past year with COVID testing, RT-PCR, lateral-flow, biobanking, racking and benchtop equipment; it has been a busy year for us all, set to continue as we roll out the new variant kits.

Also to be announced is a new venture into the sepsis point-of-care (POC) testing arena with some newly developed technology.

www.pro-lab.co.uk

Randex Laboratories

Randex, a global healthcare diagnostics company, is committed to developing state-of-the-art technology including chemistry, immunoassay, molecular and POC platforms, in addition to complete quality control solutions and high-quality first- and third-party reagents.



Vivalytic, the universal, fully automated, cartridge-based platform from Randox.

Developing the gold standard in testing, Randox patented Biochip Technology presents unique testing capabilities by enabling a multiplex testing method. This has found application in hospitals, clinical research and molecular laboratories, food testing, forensic toxicology, veterinary laboratories and POCT.

Randex adapts quickly to meet market demands and currently offers a diverse range of testing solutions for COVID-19. Utilising its Biochip Technology capable of conducting multiple tests simultaneously, the Randox Biochip has two tests for COVID-19, one specific and one confirmatory, both run on the all-in-one molecular solution, Vivalytic, a universal, fully automated, cartridge-based platform.

marketing@randox.com

www.randox.com



Comprehensive product range from R-Biopharm Rhône.

R-Biopharm Rhône

R-Biopharm Rhône is a daughter company of R-Biopharm-AG with over 30 years' experience as a diagnostics developer and manufacturer.

With RIDA QUICK, RIDA SCREEN and RIDA GENE, the company offers a variety of product technologies including rapid tests for pathogen detection, ELISAs and PCR assays covering respiratory, enteric, STI, transplant and microbiome targets. All assays are CE/IVD-marked.

In addition to an already extensive range, the company offers the Microbix range of Quality Assessment Products (QAPs) to complement diagnostic assays.

www.r-biopharm.com

Serosep UK

Join the growing number of EntericBio users in the UK, delivering fast and accurate enteric screening using Serosep UK's Enteric PCR solution. Test for bacteria, parasites and viruses using the same easy process with freeze-dried reagents for up to 46 samples per run.

What's new for 2021 from Serosep UK? Cover the new normal winter screen with RespiBio SARS-CoV-2 and combined RespiBio SARS-CoV-2, Flu A, Flu B and



The EntericBio workstation from Serosep UK.

RSV with the same easy-to-use freeze-dried reagents – just add extract.

Users who wish to add to their diagnostic armoury can do so with assays for STI and fungal testing using SpeeDx and PathoNostics, both available from Serosep UK.

www.serosep.com

Werfen

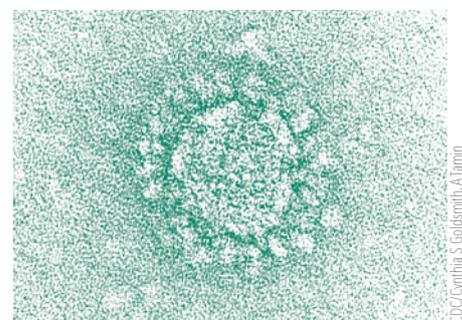
Increasing diversity of SARS-CoV-2 variants and potential higher infectivity of new viral strains underline the need to identify and track mutations across the complete viral genome.

The Novatec/Gold Standard Diagnostics (GSD) Group has launched an innovative molecular solution for the identification of the B.1.1.7 (UK) and B.1.351 (South Africa) variants with a short turnaround time.

GSD NovaType SARS-CoV-2 Detect & ID is a real-time RT-PCR test for the qualitative detection of SARS-CoV-2, and the subsequent identification of variants. The GSD NovaType SARS-CoV-2 ID is intended as a confirmatory test for potential mutants and should be performed on samples positive for SARS-CoV-2 using the GSD NovaPrime SARS-CoV-2 (COVID-19) real-time PCR kit. Further information is available from Werfen.

sales.uk@werfen.com

www.werfen.co.uk



CDC/Cynthia S. Goldsmith, AI Iamm

Molecular solutions to detect new SARS-CoV-2 variants as they emerge are available from Werfen, the exclusive distributor for Novatec (GSD Group) in the UK.

For more information, visit the BSMT website (www.bsmt.org.uk) or email Valerie Bevan (vbevan@bsmt.org.uk).