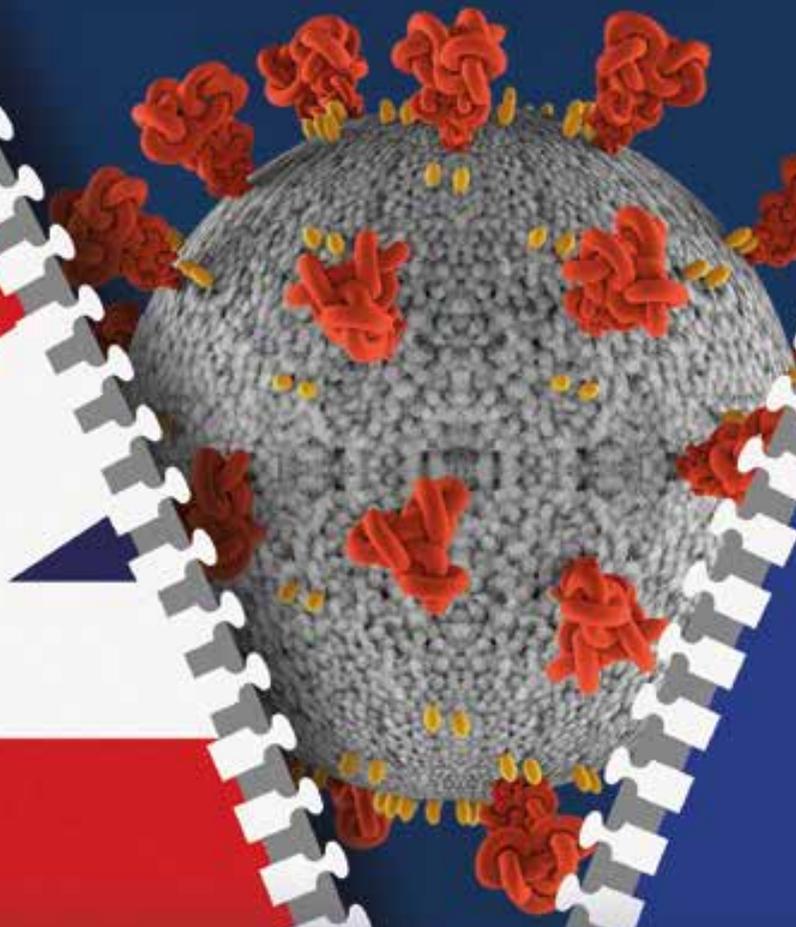


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CONNECT



SPOTLIGHT: VMIC & the fight against COVID-19

VMIC have fast tracked the new facility and it will be ready to manufacture vaccines for pandemics, such as COVID-19, a year ahead of schedule.

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Welcome to CONNECT

My name is John Harris, the CEO of OBN and I'd like to personally welcome each of you to this third edition of CONNECT, OBN's bi-annual magazine.

We are currently living through extraordinary times as the covid pandemic has affected all our lives to a totally unexpected extent, so it should not be a surprise that this edition has an overall theme around COVID-19 and the impact this has had on many areas of the life sciences industry.

Our sector has responded magnificently during this crisis, repurposing drugs, progressing new diagnostics, building scientific knowledge, and developing novel vaccines at unprecedented speed. We should all feel proud as to how our industry and community has responded to this global challenge.

And now we can finally start to see some light at the end of the tunnel especially as the Pfizer/BioNTech coronavirus vaccine has been approved to be used in December. There are also two other vaccines waiting for approval and so one would hope that the roll-out of these vaccines will enable the country to return to normality

Also, a study from the Karolinska Institute & Fondazione I.R.C.C.S. Policlinico San Matteo Pavia has concluded that post Covid infection, whilst the serum levels of anti-SARS-CoV-2 IgG antibodies started to decline, virus-specific T and/or memory B cell responses increased with time and maintained during the study period (6-8 months after infection). This provides encouragement that immunity post-infection, and via vaccine treatment, may be achievable and sustainable for a reasonable period of time and lead to population level immunity.

One hopes that as we move into Spring, we are in an ever improving situation where the prevalent catchphrase from 2020, 'You're still on mute!' becomes a thing of the past!

We hope you find this CONNECT an informative and interesting read and very much welcome your feedback.

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CONNECT is OBN'S Membership Magazine produced twice a year. It is designed and printed by Incorporate Design. The main purpose of CONNECT is to provide updates on current sector issues and a listing of OBN Members and supporters. Our readers are from companies and organisations who operate within the life sciences industry in sectors such as Therapeutic Discovery and Development, Medtech, CXO/Consultancy, Academia, R&D Support and Supply, Investment, Charity and Government. The Members Directory was up-to-date at the time when this magazine was collated and will always be subject to change. Any opinions expressed by those quoted in this magazine are their own and do not necessarily represent or reflect those of OBN (UK) Ltd. No part of this publication may be reproduced or used in any form of advertising or promotion without permission of OBN (UK) Ltd.

OBN NETWORK NEWS

Despite COVID-19 there has been lots happening in the OBN Network, some of which is highlighted below. We would like to take this opportunity to thank all our Sponsors, Supporters and all our Members for your continued support of OBN in such challenging times.

2020 will go down in the memory as a challenging time for almost everyone. The life sciences sector has fared better than many and perhaps public understanding around medical sciences has increased as result of COVID-19. For early stage companies operating on a slim budget and tight timelines the reduced ability to meet investors has made life tough.

At the end of April, we launched OBN Ventures, an on-line platform that connects investors and early stage companies and are working to add new Deals to the site. Currently we are very pleased to host offers from Carocell Bio, developing nanoparticle-delivered, peptide-based, treatments for inflammatory diseases, and Evolution Biotechnologies working on biological control agents for house dust mites, one of the major causative agents of asthma.

Despite the difficulties we are happy to report that £300M-plus has been raised by OBN Members since the start of March 2020. Leading the way is Oxford Nanopore (£133M) who welcomed new international investors, supplying funds for acceleration of the company's commercial and manufacturing operations. Exscientia also raised impressively (£58.5M) and it was great to see further support for Immunocore (\$130M) who are once again making steady progress. Base Genomics (cancer diagnostics based on DNA methylation) was an interesting one:

incorporated in July 2019, raised £9M in June 2020 and was acquired by Exact Sciences on 27 Oct 2020!

The OBN Purchasing Consortium continues to be a major attractor for OBN Membership, currently used by 120 companies! There are 20 suppliers, perhaps most pertinent to companies carrying out wet science are Fisher Scientific and Merck, however a recent addition that medtechs are finding useful is RS Components. On top of these the consortium is also pleased to provide connections with a range of other suppliers and service providers that can help lower costs. We are always happy to talk over how money can be saved so don't hesitate to get in contact.

Looking ahead: BioSeed 2021 will be taking place in a LIVE digital format on a slightly earlier date of Thursday 21 January 2021. We are working with an excellent development team to create an exciting digital platform that exactly replicates all of the core deliverables of the original 'in-person' Live BioSeed event. Looking back at the presenters in January 2020 a number have made great steps: recognised as finalists in the OBN Awards BioSeed 'One to Watch'. These are PanCryos (stem cell derived beta cells for diabetes), Modulus Oncology (first in class antagonists to the adrenomedullin 2 receptor) and Kinomica (bioinformatics and phosphoproteomics methods for analysis of cell signalling).

We have welcomed many new members to the OBN Membership since the last edition of CONNECT - please see details below.

Sponsors

AggioSergeant	Specialise in life sciences executive search and company culture change
Bruntwood Scitech	The UK's leading property provider dedicated to driving the growth of the science and technology sector
Taylor Wessing	A global law firm providing services across many sectors including the life sciences

Supporter

Oxford Innovation	The UK's leading innovation and incubation centre operator. Also providing feasibility and consultancy services and design and financial modelling
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Full Members

AccendoLab	Provide workplace testing for COVID-19
Antiverse	Developing an AI driven antibody discovery platform to predict antibody-antigen binding and provide antibody drug candidate selection

Full Members

Base Genomics	Developing the proprietary TAPS platform that generates both genetic and epigenetic information at base resolution. Multiple applications in diagnostics, patient monitoring and many other areas.
Celleron Therapeutics	Developing new cancer drugs, Celleron's preclinical pipeline consists of a series of target enzymes involved in control of epigenesis with key roles in cancer biology
Glaia	Aiming to enhance agricultural productivity and reduce pressure on natural resources by optimising the performance of plants
Newrotex	Developing a silk-based nerve conduit to treat peripheral nerve injury (PNI). The 'off-the-shelf' device allows immediate treatment for patients who have suffered injury through trauma or cancer surgery, without any of the associated risks of the current gold-standard treatment of autografts
Ochre Bio	Developing genomic medicines to reprogram liver metabolism
Oxford Stemtech	Developing innovative approach to produce induced pluripotent stem cells for research
Principlelabs/Office Laboratories	Expert laboratory design and build
Prisma	A biotech software development company and consultancy with experience in research informatics, biology, software, and mathematics
Psyros Diagnostics	Developing an ultra-sensitive point-of-care diagnostic technology platform
SPG Innovation	Commercialisation of IP in food, life sciences and agritech providing wide range of services in this area
The Vaccines Manufacturing & Innovation Centre	VMIC is a not for profit research company within the national scientific infrastructure providing strategic vaccine development and manufacturing capability
Zentraxa	Developing a range of new peptides products based on a detailed knowledge of marine mussels adhesion protein and a novel production that enables their exploitation. Applications include in medicine, personal care product ingredients and nutraceuticals

Network Members

Avidity IP	Commercially focused European & UK patent attorneys specialising in life sciences and medical technologies
Avitus Group Companies	Provide a range of services for growing businesses including accounting, payroll, HR, insurance, recruiting amongst many others
British Columbia Trade and Investment	Trade and Invest B.C. works with international enterprises to help them build strong links to the resources, skills and businesses that make British Columbia an attractive place to work and invest
Creoptix AG	Provides technologies and expertise for gathering data on a wide range of biological interactions including to detect and quantify biological interactions in real-time, providing both binding affinity and kinetics
Enplas Corporation (UK Office)	A global corporation with diverse interests. Enplas Life Tech is the leading single-source manufacturer of high-quality custom plastics parts for global OEMs in the medical, biotech, pharmaceutical, and life science industries
Fieldfisher	A multinational law firm which has practices in sectors including real estate, energy, financial services, government & public services, hotels & leisure, life sciences, media, telecoms, and technology.
High Force Research	Provide bespoke chemical design and synthesis services
Intech Calibration	Laboratory calibration services and Laboratory furniture/fit-out
NDY Consulting	Consulting engineers
Nikalyte	A leading supplier of various nanoparticles coatings for R&D and commercialization in a wide variety of application areas including cell binding, cell separation, drug delivery, catalysis, metamaterials, nano-photonics, electrochemistry, and batteries
Oxford Technology Park	A new science and technology park in Oxford
PharmaKrysto	Developing new therapeutics to save kidneys and prevent pain in people with cystinuria
Rexgenero	Developing autologous cells therapies with a focus on peripheral vascular disease
Sarepta Therapeutics	Developing breakthrough therapies to treat genetic disease with a focus on muscular dystrophies and Charcot-Marie-Tooth
StarLeaf	Video conferencing platform
Yourgene Health	Molecular diagnostics company providing a range of gene testing and analytical services to a range of markets

INVESTMENT SUCCESS OF BIOSEED 2020 COMPANIES



BioSeed has proved to be a great opportunity for early-stage life sciences companies to secure investment – Sarah Walker, Senior Events Manger, got to interview some of these companies and find out more about their funding journey.

BioSeed provides a platform to early stage companies to deliver their investment pitch to over 100 specialist investors.

Kinomica, a proteomic-data science and diagnostics company specialising in cell signalling, was looking to raise £3.5m in Series A funding to commercialise their KScan™ further and expand research laboratory operations to a GLP service for clinical trials.

Since BioSeed they have been very successful, over the summer they had a competitive cornerstone situation with 3 credible investors wanting to invest in them. They went with a syndicate which was well aligned to their ambitious company vision and gave them an evaluation that their investors were happy with. As a result of BioSeed Kinomica have attracted additional investment from their seed investors and are now in the final process of due diligence. Kinomica are now in a healthy situation and really feel that they can now begin to impact patient treatments going forward.

Jane Theaker, CEO of Kinomica explained that

“We used BioSeed to launch our series A fundraising campaign and the value we got out of it was immeasurable. I got to see wide range of company presentations and made a lot of contacts in the investment industry. I love the vibrant entrepreneurial vibe of the event and I got to meet other CEOs which gave me a great sense of the community out there and the network I could call upon.”

To watch the full interview with Jane Theaker please [click here](#).

Some of the deals can be turned around really quickly as was the case with one of our other BioSeed companies, CircaGene, a digital health company which aims to protect and improve public health.



CircaGene were looking for £200k when they went to BioSeed in January and then in March had raised a bit more than the £200k. There was someone from a FC Capital in the audience who was interested in CircaGene. By March, the company went through due diligence and the deal was completed in the same month and so it was very quick.

François Paillier, CEO and Co-Founder of CircaGene said that

“Pitching and networking is the best way to find your investor, as it was for us.”

Please [click here](#) to see the complete interview with François Paillier.

Even if you are not able to complete a deal immediately after coming and pitching at BioSeed, from speaking to our past companies it is definitely a valuable opportunity which can open up doors for the future.

Jacqueline Ameri here, CEO and Co-founder of Pancryos commented that

"I actually had several good investor dialogues that originated from this conference, and although I'm not in active dialogue with those specific investors for the moment, I think it's always good to expand my network for future opportunities."

Pancryos is a spinout from the Novo Nordisk Foundation Center for Stem Cell Biology (DanStem) at Copenhagen University, and is developing a best-in-class allogeneic stem cell-based cell therapy, PanINSULATM for treatment of Type 1 Diabetes (T1D). Pancryos were seeking 5M Euro to complete their pre-clinical work to initiate a phase 1/2a clinical trial to assess safety and efficacy of their product PanINSULA™. The funds were going to be used to cover generation of clinical cell banks and GMP adaptation and upscaling of our process, and in vivo validation of our product. Pancryos has recently secured additional funding of 1M Euro, which will allow them to extend their



financial runway and to finalise ongoing and promising investment dialogues with VCs.

Dr. Hector, CEO and Founder of **Oxford Immune Algorithmics** described attending BioSeed as

"An enriching experience to interact with so many experienced investors and VCs at the same time all reachable at a single event. Many of them continue engaged and are still planning to support us in the future. The cost-benefit is worth it. The event is a gateway to increase any start-up lead's network."

Oxford Immune Algorithmics is a biotech company incubated by the University of Oxford that teamed up with members of the University of Cambridge to develop Algoocyte the smartest end-to-end platform for blood testing and regular monitoring of the immune system developed with the help of the NHS.

Oxford Immune Algorithmics are looking to raise were looking to raise 1M GBP to accelerate the further development of their solution Algoocyte mostly to accelerate development. They raised a fraction of what they wanted to raise right when the pandemic started and are now restarting their efforts to start a second larger round.

This time has served them to focus on delivering the prototype that they now have. The irruption of the pandemic as made it harder, but they have been able to do with less a lot more by being highly capital efficient and adjusting themselves to the new reality. They are now in a position to start their fundraising campaign again after reaching several milestones, including signing co-development and evaluation contracts with the NHS and scaling their international expansion capabilities. ■

OBN would like to thank all our BioSeed 2020 companies who kindly participated in this interview process.

BioSeed 2021 will be taking place in a LIVE digital format on **Thursday 21 January 2021** with all of the core deliverables of the original 'in-person' Live BioSeed event. Please go to www.bioseed.co.uk for all the details and how to book or email sarah.walker@obn.org.uk if you have any questions.

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KEY REGULATORY UPDATES RELEVANT TO R&D COMPANIES



The experts at EUDRAC provide an insight into the MHRA guidance and what this means for the life sciences industry.

With the end of the transition period looming at the end of December MHRA have recently published updated guidance¹ on how various aspects of medicine and device regulation will occur in the event of a no-deal Brexit. MHRA also organised webinars across a number of subjects to supplement the published advice. Given the ongoing political discussions, a no-deal Brexit is the only plan that can be made to allow the regulators and industry to prepare appropriately in the short time remaining.

MHRA Guidance

Since MHRA's previous guidance was published over a year ago, a main element of difference is the impact of the Northern Ireland protocol. This affects a number of areas including centrally authorised medicines (i.e. by the European Commission, under the processes of the European Medicines Agency (EMA)) with Northern Ireland continuing to operate under the jurisdiction of the European Commission, while products for Great Britain will be 'grandfathered' into MHRA's system and then subsequently maintained under the UK national system. New medicines that are authorised by the European Commission will include Northern Ireland in their remit, whilst the same product will need to be authorised separately by MHRA for Great Britain. The split between Northern Ireland and GB is apparent in a number of areas of the guidance.

IT Systems

It is assumed that MHRA will not have access to any EU systems (e.g. EudraCT, EudraVigilance, EMA's Gateway, CESP) from 1 January 2021 and as a consequence, MHRA has had to develop or expand upon their existing IT infrastructure. Companies therefore need to register with these systems ahead of the end of the transition period.



Standstill Period

A new phrase has been communicated in the MHRA webinars of the 'standstill period' whereby there will be a continued acceptance of EU processes e.g. use of an EU QPPV for the UK, acceptance of EU/EEA sponsors for clinical trials, acceptance of EU CE mark for medical devices. The standstill period is a varying time depending on the subject but is typically 12-30 months.

The split between Northern Ireland and GB is apparent in a number of areas in the guidance.



Clinical trials

A specific reference to clinical trials is relevant as this may impact many OBN members. As mentioned previously, the assumption in a no-deal Brexit is that MHRA will not have access to EU systems including EudraCT and CESP. CTA submissions will therefore be made via the MHRA Submissions portal. MHRA intend to rollout their pilot programme of Combined Ways of Wording (CWoW) to all sponsors in 2021 which allows a single submission to MHRA and ethics committees via the IRAS system and does not require completion of the EudraCT form. Until that time, Sponsors can continue to use the EU forms for an initial CTA, amendment, or end of trial notification. The existing alternative UK systems (eSUSAR and MHRA Gateway) for reporting Serious Unexpected Suspected Adverse Reactions (SUSARs) to MHRA will become the primary mechanism since EV Web and the Eudravigilance Gateway will no longer be available.

Conclusion

There is little time before the end of the transition period at the end of 2020. Companies should become familiar with the recently published guidance and ensure they are appropriately registered with MHRA's various IT systems to allow business continuity. The aim of MHRA is to provide a smooth transition over a specified period, to ensure the UK is an attractive country for conducting clinical research and to allow UK patients continued access to novel medicines and devices. A deal with the EU may allow elements of the UK guidance to be amended to align for closer working with the EU. ■

¹ <https://www.gov.uk/government/collections/mhra-post-transition-period-information>

Companies should become familiar with the recently published guidance and ensure they are appropriately registered with MHRA's various IT systems to allow business continuity.



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VMIC & THE FIGHT AGAINST COVID



SPOTLIGHT

VMIC have fast tracked the new facility and it will be ready to manufacture vaccines for pandemics, such as COVID-19, a year ahead of schedule.



Back in May this year, the UK Government awarded £93m to the Vaccines Manufacturing and Innovation Centre (VMIC) to help in its fight against COVID-19. The money was provided to expand the facility's production capabilities by more than 20-fold and to fast-track construction so that it opens in 2021 – one year earlier than originally planned. There was a compelling reason for this... the Government needed a one-stop-shop to manufacture vaccines for pandemics with enough capacity to make up to 70million doses within a 4-6 month timeframe.

Fast forward to November and the VMIC facility is on track to open in 2021 with an ambitious development schedule and has simultaneously remained a firm fixture at the heart of the national pandemic response. VMIC scientists and engineers have been involved in the Oxford University consortium since day 1, leading on how to scale up manufacture of what is now known as AZD1222, or the Oxford/AZ vaccine, as well as having established a rapid deployment centre, 'Virtual VMIC', in order for the UK to have a facility that could begin manufacturing this adenovirus vector vaccine candidate in 2020. Additionally VMIC remains a crucial part of the Vaccines

Taskforce and is supported by all levels of UK Government, culminating in a visit to the site at Harwell Campus from Prime Minister Boris Johnson.

And this isn't even the day job! VMIC's day-to-day work once it opens, will be to partner with industry, academic or research teams and to provide expertise and manufacturing capability in order to take vaccines quickly from discovery to licensed product. Ultimately the purpose of VMIC is to share its knowledge, technical capability, and innovative approach to process manufacturing, in order to grow the UK's vaccines capabilities for the benefit of both the national and international vaccines community.

Reflecting on what has been achieved since he was tasked by Government to expand and fast-track the facility by a year, VMIC CEO, Dr Matthew Duchars acknowledges that he knew it was possible, but not without a colossal team effort, "Whilst no-one could have predicted the COVID-19 outbreak, we set out to do all we could to fast track the build so VMIC could offer long-term support to the UK should future pandemics occur. I am extremely grateful to all the teams involved who have worked together to fast

Opposite:
The facility as it was in September when they received planning permission, months after work had begun. Representatives within the photo from Vale of the White Horse District Council, VMIC, Harwell Campus and Glencar.

Above:
PM Boris Johnson visiting the site.



Above: This bioreactors photograph is reflective of the specialist manufacturing equipment VMIC purchased and had installed in Virtual VMIC, the rapid deployment centre. Includes Allegro™ STR bioreactors 50 L and 200 L from Pall corporation.

track the facility, from the Vale of the White Horse District Council to the development and construction teams, and our staff, who continue to work all hours and move at a phenomenal speed. This collaboration is vital in our race to build a pandemic capable vaccine manufacturing facility ready to open in 2021."

Being able to contribute to the manufacturing of a COVID-19 vaccine in 2020 has been high on the list of requirements from Government too and in June VMIC signed a collaboration with gene and cell therapy group Oxford Biomedica plc, supported by government funding, to establish a rapid deployment centre known as 'Virtual VMIC' whilst the permanent facility was being built. The two GMP suites, now established with VMIC equipment can operate at 1000L scale and are dedicated to the manufacture of the Oxford/ AZ vaccine. The suites, operated by Oxford Biomedica, are located in their commercial manufacturing centre, Oxbox, in Oxford, and were approved by the MHRA in October.

The benefit of co-location is an important factor for Dr Duchars, "It was a milestone moment in the UK's fight against COVID-19 when the MHRA approved the GMP suites. The suites have the ability to make tens of millions of doses of the current leading vaccine candidate and this would not have been possible without the knowledge and expertise of the Oxford Biomedica team, the timeliness of their facility being available

"Being able to contribute to the manufacturing of a COVID-19 vaccine in 2020 has been high on the list of requirements from Government too and in June VMIC signed a collaboration with gene and cell therapy group Oxford Biomedica plc, supported by government funding."

and ready for use, and without the added advantage of it being up the road from where we are based."

So what's next on the list for Dr Duchars and his team as they move from 2020 to 2021? "We remain focused on delivering the facility and bringing it online in 2021, and we continue to work closely with AZ/ Oxford, and also the Vaccines Taskforce, and we have other considerations too now. We have grown rapidly in the last six months, going from a team of 10 to 60 and with that comes new challenges, new ways of working and also new opportunities. As an example, we've recently appointed 10 Biotechnologists who are undertaking training with Oxford Biomedica as part of our ongoing collaboration and this will ensure there is a highly skilled team ready to manufacture a leading COVID-19 vaccine candidate, once approved, when the VMIC facility is operationally ready.

"Focusing on getting the right team in place and everyone sharing the same vision for what needs to be achieved is a priority. As we move into our final stages of recruitment in 2021 we will enter an even more gruelling programme of work and we'll be looking for highly skilled and motivated people to join us as we continue this journey in order to deliver what the UK needs and expects from us, in 2021 and beyond." ■

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HAS COVID-19 SLOWED CLINICAL RESEARCH?



Michael Towse, Executive Director, Marketing & Business Communications at Precision for Medicine, provides on-the-ground facts and the knock-on industry-wide implications.

Industry-wide, the CRO environment is heavily regulated. The very nature of our daily work requires strict adherence to process in order to conclusively prove efficacy—and, of supreme importance, to defend the safety of patients in our trials. Yet, carefully guarded processes can also stifle innovation and resist efforts at improvement.

During the early part of 2020, COVID-19 was a direct challenge to processes industry-wide. Some steps which are typically mainstays in a clinical trial were suddenly untenable due to global or local pandemic-related restrictions. With national and international travel strictly curtailed, site visits became challenging for both monitoring staff and patients. And medical teams struggled under the strains of a global pandemic.

No aspect of the industry was left untouched. In order to continue operations, the industry came together as a global community and

got creative, adopting innovative solutions throughout the entire life science supply chain. Pragmatism and openness became the new watchwords.

Notably, many organizations pushed past their comfort zones to embrace technological advances. Although many newly adopted technologies were available pre-COVID, their value is now more starkly apparent.

Overnight, video calls became the de facto means of communication—and built unexpected bridges both internally and with

With national and international travel strictly curtailed, site visits became challenging for both monitoring staff and patients.





We often hear the phrase ‘the new normal’ relative to COVID-19 and the environment we all now inhabit. The new normal in the life sciences industry, I believe, is more willingness to harness the new technologies at our disposal.

site staff. Self-reported results and mobile health devices reduced the burden on patients. Technological platforms expanded remote monitoring. In areas small and large, hi-tech solutions solved intractable dilemmas.

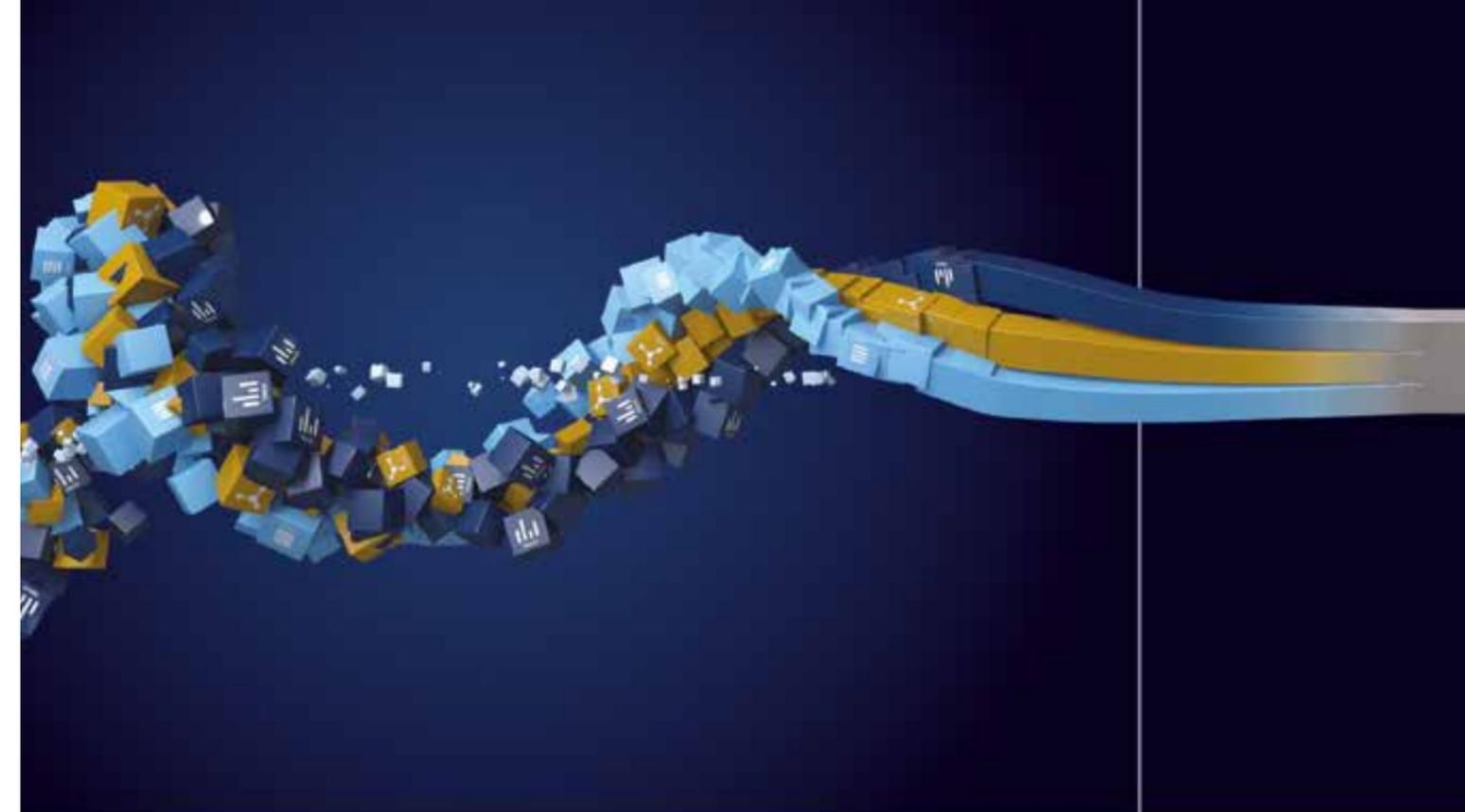
These new methods were adopted at a furious pace for one simple reason: the need to continue the pace of trials to bring critical new therapies and devices to patients in need. But it’s had an interesting side effect: now innumerable new time- and cost-efficiencies cross every aspect of our workflows.

So, did COVID-19 slow clinical research? Yes. Its initial impact was obvious. But due to industry-wide tenacity, any decrease in traction was temporary—and now the industry is operating more efficiently than it was before the pandemic.

We often hear the phrase ‘the new normal’ relative to COVID-19 and the environment we all now inhabit. The new normal in the life sciences industry, I believe, is more willingness to harness the new technologies at our disposal. Once the pandemic has passed, we would be remiss to forget these lessons. We have proven that process and innovation are not, in fact, incompatible. ■

Michael Towse 

Precision for Medicine
Executive Director,
Marketing & Business Communications



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HOW IMPORTANT HAVE BIOBANKS BEEN DURING THE PANDEMIC?

Naomi Allen, Professor of Epidemiology at the Nuffield Department of Population Health at the University of Oxford gives an insight into the work of UK Biobank.

On Tuesday 3 November OBN hosted an online event addressing 'An Insight into the Role of Biobanks in Life Sciences R&D Innovation', and we welcomed Naomi Allen, Professor of Epidemiology at Nuffield Department of Population Health, University of Oxford, as a keynote speaker.



Naomi was able to share how the UK Biobank has facilitated research into COVID-19 to determine the extent of previous infection with coronavirus in 20,000 volunteers, made up of UK Biobank participants and their adult children and grand-children. Using the data that the UK Biobank already holds, Naomi explained "We will be able to see how infection varies by different population characteristics, such as by age, sex, ethnicity, region etc., and repeated samples will show how antibody levels change over time, which will help to address questions around immunity and likely re-infection." Samples have been sent to the Target Discovery Institute, in Oxford, for the measurement of IgG antibodies. About 8% of the study population had been infected with the virus between Mid-May to Mid-September 2020.

In 2021, the UK Biobank will also be starting a new and unprecedented study enabling research into the effect of coronavirus on internal organs through the use of imaging measures. Naomi told us "It will be the only study in the world with both pre- and post-infection imaging data, using standardised measures."

This research will involve sending a self-administered antibody test to all 50,000 participants who have previously attended an imaging assessment, so they can inform UK Biobank as to whether they have

antibodies or not. UK Biobank will then invite 3,000 of them (half of whom are positive, and half are negative) to attend a repeat imaging assessment.

"It will be the only study in the world with both pre- and post-infection imaging data, using standardised measures."



UK Biobank is also providing rapid and regular updates for health records to facilitate COVID 19 research such as PHE antigen testing data, death registry data, and data from hospital in-patient admissions and primary care records, with at least 4,000 of COVID cases ascertained so far in the cohort.

This data are enabling researchers around the world to investigate how lifestyle, co-morbidities, medication and genetic factors influence the development of COVID 19, across the full spectrum of COVID-19 disease severity.

As you can imagine this has generated great interest globally and has led to over 600 research groups already accessing this data and conducting their research with at least 60 papers coming out so far but with many more to come, for example looking at factors such as ethnic disparities in disease rates, and the association of obesity, vitamin D and other biomarkers and genetic factors on the development of COVID-19. ■

This has generated great interest globally and has led to over 600 research groups already accessing this data.

Please click **here** to enjoy the BioTuesday event which Naomi kindly presented at alongside Catherine Blewett, Senior Development Manager at HRA, NHS and a case study from Morag McFarlane, CEO, & Fiona MacKenzie, Client Services Director, at Tissue Solutions.

At This BioTuesday event our experts shared an update on how biobanks have evolved, common goals between partners and the potential impact on future research



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Key 2021 Training Dates For Your Diary:

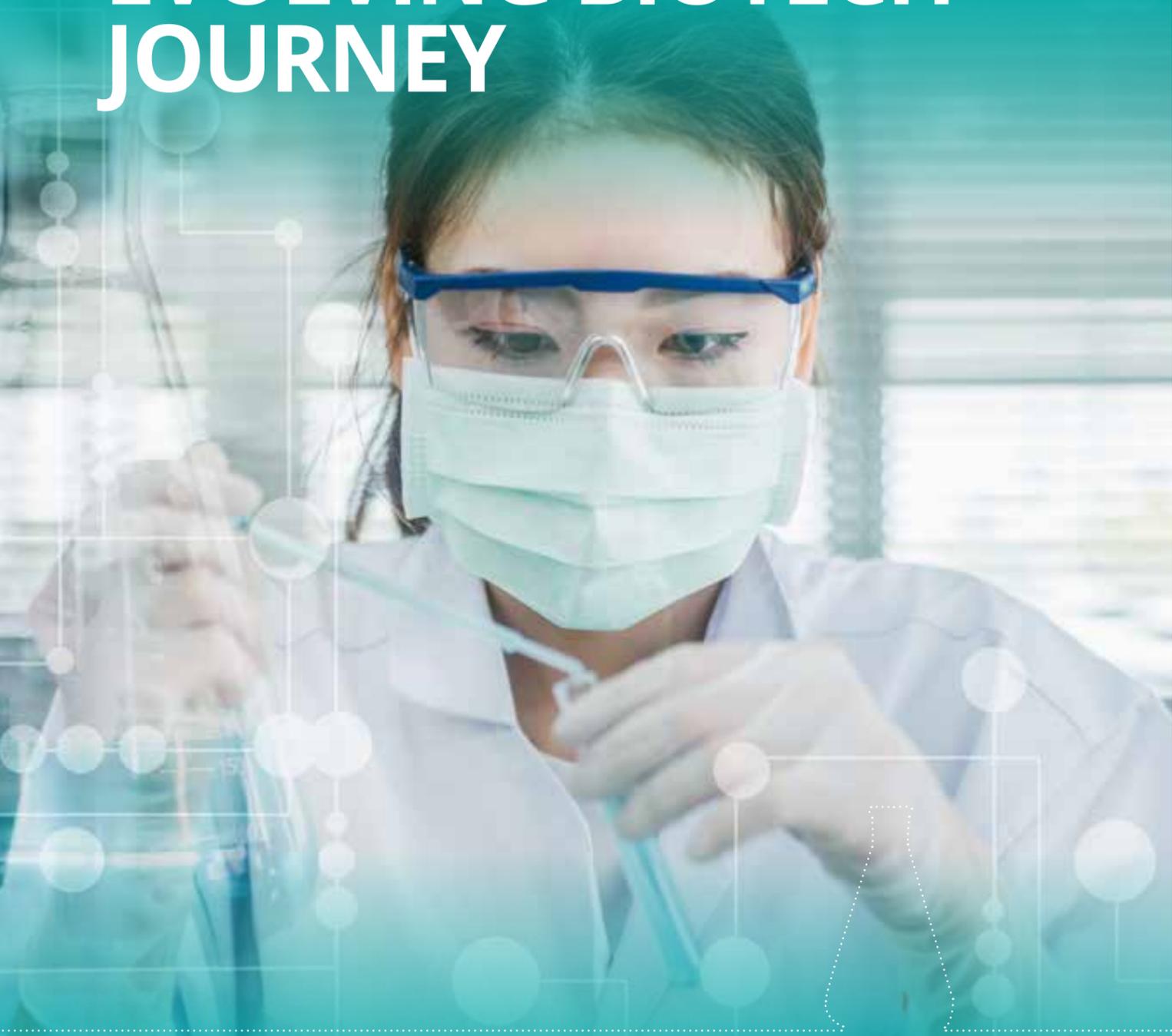
Biologically Derived Products Manufacture, Testing & Compliance	6 to 7 January
Key Regulatory Updates for the Pharma Industry	15 January 19 March
Responsible Person & GDP	19 to 21 January 22 to 24 March
QMS Lead Auditor	8 to 12 March
Good Manufacturing Practice	19 to 21 April
New Medical Device Regulation (MDR) 2017/745	24 May
Manufacturing Sterile Products	14 to 15 June
Practical GMP for ATMPs	15 July



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SUPPORTING THE EVOLVING BIOTECH JOURNEY



Scientific breakthroughs are occurring at unprecedented speed, creating exciting opportunities and associated challenges for the biotech industry. Thermo Fisher Scientific share the part that they are playing.

The most universal challenges identified by our small and emerging biotech customers are those that limit speed and effectiveness. They tend to be aligned around “moment of truth” milestones which may include lab start-ups, building commercial scale and everything in between.

In a highly fragmented industry, there are multitudes of fragmented, overlapping and incomplete solutions, but true end-to-end, scalable solutions are elusive. That’s where Thermo Fisher Scientific enters the picture, with a commitment to address this gap with a carefully constructed and constantly growing portfolio of solutions - designed to help you succeed from early R&D through commercialization.

Developing and executing a winning competitive strategy requires expertise, informed by broad industry knowledge and focused application knowledge – in research, operations, development, process scale up, regulatory and manufacturing. Driven by science, we are uniquely positioned to support your strategy - across the value chain.

Key Trends Shaping Drug Development

Evolving Landscape

- Favorable demographics driving demand for medicines
- Increasing importance of APAC

- Increasing regulatory complexity and compliance requirements

Changing Product Mix

- Rapid adoption and acceleration of biosimilars
- Increased complexity of new molecules

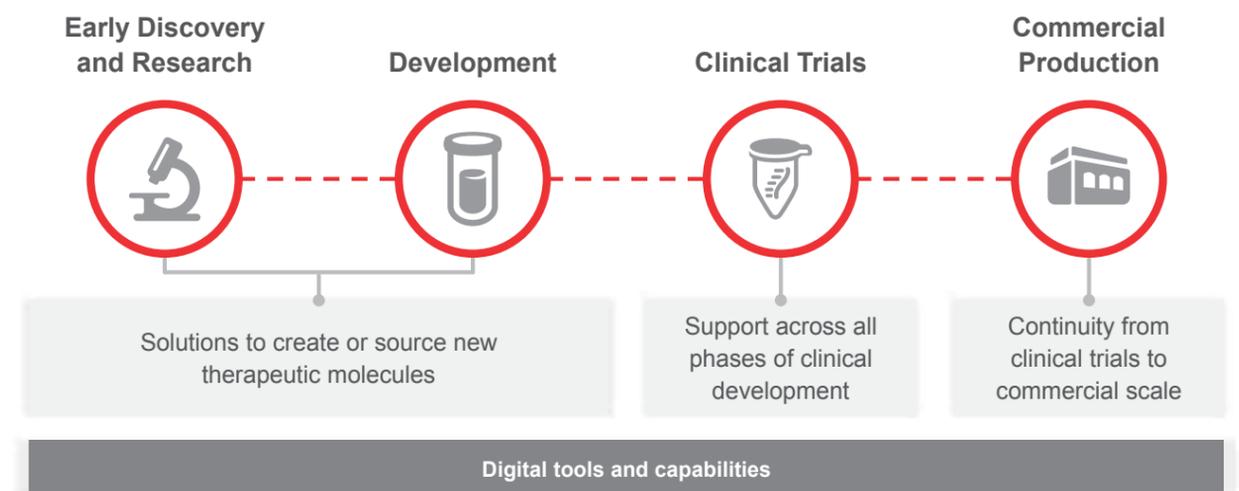
- Shift to specialty drugs: cell therapy, orphan drugs, steriles (biologics and small molecule)

Shifting Business Dynamics

- Mismatch between drugs in the pipeline and manufacturing capabilities and capacity
- Increasing pressure to drive cost efficiency, maximize operational flexibility and accelerate time to market
- Big Data-driven insights informing every step of the process

HOW WE SUPPORT THE BIOTECH VALUE CHAIN

Your Partner for Every Step in Your Therapeutics Journey



To attain market success by improving health outcomes, Thermo Fisher Scientific is the one partner you need



EARLY DISCOVERY AND RESEARCH

Although our solutions span the entire value chain, in this article we focus on key R&D services which support young biotech companies, by helping to manage capital expenditures, address talent gaps and provide access to industry-leading technologies.

For those companies in the start-up phase, we offer special programs and expertise from lab design to complete workflow solutions & integrated systems of instruments, reagents and software. Combined with financing options and technical/application expertise, we're able to get you up and running and help you prepare for your next milestone.

Once labs are operational, solutions for ongoing lab management and support are available, with scaled procurement solutions (from simple p-card options to full web integration), inventory management options, and services like glass wash, instrument management and others that enable scientists to focus on mission critical activities.

Technical expertise is available in person from our team of application experts and through rich web content at thermofisher.com.

As you sharpen your research focus, our portfolio of market-leading services can help you increase your lab's productivity and efficiency with a comprehensive suite of services, customized just the way you need them. Our wide range of services, highly trained staff, proven solutions and commitment to your project will help you meet even your most challenging research goals. From custom manufacturing, business consulting and protocol development, to instrument repair and optimization, we draw upon our wide range of premium, high-quality products to create customized, scalable, efficient solutions for your research. ■

Thermo Fisher is committed to contributing to the success of biotech companies like yours.

For more information on how we can work together, please contact:

Ashley Box
Director, Business Development
Thermo Fisher Scientific
(ashley.box@thermofisher.com)

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Lab Instruments & Equipment	Enterprise Lab Informatics	Financial & Leasing
Instrument services and maintenance plans as well as compliance, validation, and calibration services. Includes general instrument service programs and specific ones, such as Environmental Monitoring Instrument Services and Process Monitoring.	Help to integrate, migrate, validate and manage data across your enterprise.	Finance or leasing plans to provide financial flexibility to support your long-term goals.



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Target ID and validation Identification of gene targets and linkage to diseases siRNA screening CRISPR screening • LentiArray/CRISPR libraries Gene to protein services • Applications from target ID and validation to assay development and screening Custom peptides Solutions across the drug discovery workflow: • PEPotacSRM Libraries • HeavyPeptideAQUA standards • Standard peptides Custom Antibody Production • Monoclonal polyclonals • -Monoclonals • -ABlnity™ Recombinant Antibodies • -Hybridoma Expansion (to 100L) Screening Loss of function Screening: • siRNA, Silence Select • -CRISPR, LentiArray Libraries	Assay development Creating test systems to evaluate the effects of compounds on a target Biochemical assay technologies • LanthaScreen antibodies as well as Adaptaand Z'-LYTE kinase assay kits Cellular assay technologies • GeneBLAzer, CellSensor, and Tango cells Genome editing • TALs and CRISPR Cell line production • Stable cell line generation -Transfection -Lentiviral transduction • Jump-In and Flip-In for stable expression • BacMan reagent for transient expression Stem Cell Services • Reprogramming • Genome editing • Differentiation • Cas9-iPSC Cell line characterisation • Karyostat assay • PluriTest Analysis Tool • TaqMan PSC Scorecard Panel Custom peptides • HeavyPeptideAQUA custom synthesis service Immunoassays • Assay development & testing services	Screening and lead ID Rapid identification of active compounds Bulk screening reagents • Custom protein production service • Antibody labeling services • Bulk kinases and assay reagents • Cell provisioning services SelectScreen profiling services – biochemical • Kinase • Nuclear receptors Library screening services • Custom library screening • Directed evolution (mutagenesis) services	Lead optimisation Demonstrate efficacy, optimise specificity and establish safety of drugs in cellular models SelectScreen profiling services – cellular • GPCR • Nuclear receptors • Biochemical Drug metabolism • P450 • Cryohepatocytes Drug safety • hERG • Nuclear receptors Custom peptides • AQUA-grade peptides

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FINANCING EARLY-STAGE BIOTECH IN THE LOCKDOWN DIP

Legal experts from Taylor Wessing share what we are hearing from investors and outline what start-up biotech companies most urgently need to consider and seek guidance for over the next 24 months to bridge the lockdown.

The COVID-19 pandemic has and will continue to have a huge impact on worldwide economies. In the life sciences and biotech investment sector, and in particular for early stage biotech companies, the crisis has brought every biotech company's cash runway into sharp focus. But what does this mean to investment in the life sciences industry, particularly early stage companies? We've asked the experts and here's their advice...

Prioritisation during a dearth of financing

At the start of the COVID-19 crisis, the life sciences sector was better funded than at any other time in history and throughout the COVID-19 crisis that level of funding has held up extremely well with 2020 looking like it will be an all-time record for the sector. However, the high level of funding for the sector has not been felt uniformly across the sector. It has been buoyed by a relatively small number of later stage companies raising very large amounts (including through a record number of IPOs and follow-on financings from the public markets). At the same time there has been a dramatic fall in seed and series A round fundraisings for early stage companies.

Amid this backdrop, what can early stage biotech companies do since the unsettled economic outlook increases the risk that the company will not be able to raise its next round of investment capital on schedule.

One immediate task for emerging private biotech companies, unless they are well-funded, is to establish how to conserve money to increase their runways, with the aim of getting

through the current crisis and surviving until "normal" conditions return. This inevitably involves prioritising programmes that are either essential to the corporate strategy, for example those that provide the highest long-term value opportunities or those that have milestone payments achievable in the short term and shelving the rest. Anecdotally, one of our clients (an emerging European biotech) reports that it has frozen all but 12 of its approximately 400 projects, to illustrate the degree of prioritisation facing some companies.

Private financings alone might not be a lifeline for all

It is of course not all doom and gloom for early stage biotechs – indeed it seems we are entering a golden era for the sector. Several commentators are predicting increased volumes of investment into the life science sector in the longer term, as the COVID-19 crisis has highlighted to possible investors the importance of its technologies and products as well as their potential value. New venture funds are still successfully being raised, and there is still plenty of dry powder around in investment capital terms with many existing funds not fully allocated. For example, Epidarex

TaylorWessing

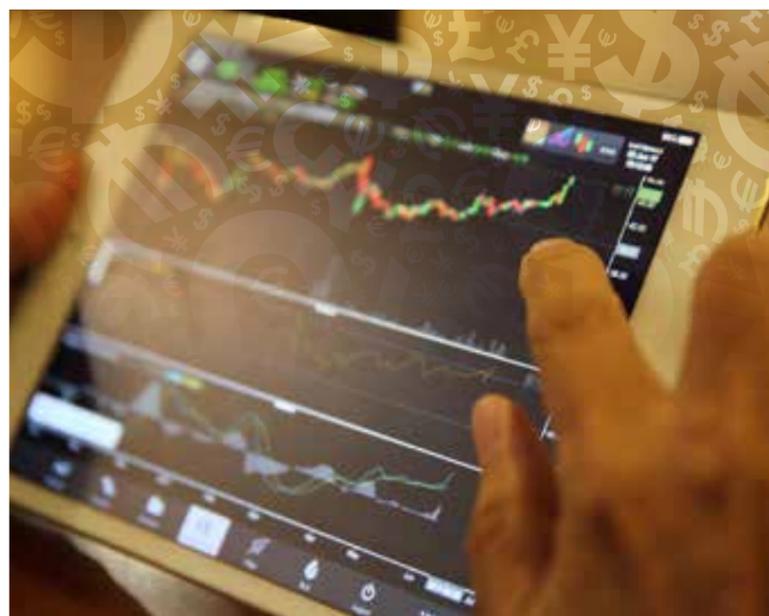


and BioGeneration Ventures both raised over £100 million and €100 million respectively for early stage European biotech companies. So, in principle the sector is still open for business.

However, over the next six to 12 months, private financings are likely to face challenges. We've already seen a significant reduction in the number of seed and series A rounds. Some venture capital investors are looking after capital to follow up on their existing portfolio. Others are waiting to see how far valuations fall, in order to pick up cheaper assets. This means that better capitalised companies with deep-pocketed investors, are likely to continue to raise money, though with greater difficulty and on more stringent terms than in previous rounds.

Partnering as an alternative path to raising capital

Partnering with big pharma/biopharma companies can provide an alternative way for biotechs (especially biotechs with a platform technology) to raise capital to extend their cash runway – especially where decent upfronts are negotiated. Big pharma and larger high-growth public biopharma are more insulated from capital market swings so are likely to remain active in seeking partnering deals and should be well-positioned to deploy their balance sheets to build their asset pipelines. This is being borne out by what we are seeing in the market. The volume of partnering



transactions during the crisis appears to be holding up well. Virtual negotiations are not proving to be a barrier.

Given the COVID-19 funding pressures, this trend in earlier-stage partnering deals has continued during the COVID-19 crisis and looks set to continue further – the non-dilutive financing available from such deals proving to be a very attractive source of capital to early stage companies. However, one thing biotechs need to be aware of is that to justify a healthy upfront, pharma companies may ask for deal-sweeteners in the form of follow-up or back-up programmes to be included in addition to the lead or secondary programme. These are considerations that require careful thought and advice from experienced deal makers.

Summary – focus your efforts and widen your horizons to extend your runway.

Companies seeking investment for the first time or companies with less deep-pocketed investors and less money in the bank may find it hard to raise capital through private financing rounds (despite the headline grabbing numbers - £1 billion raised in Q3) – particularly if they are looking to bring on board new investors to co-ordinate a new round. Our guidance to our investor base and our emerging biotech clients has been focused around assisting them to look to other sources of funding to plug the gap e.g. with partnering deals with significant upfronts, grant funding or COVID-19 state-aid schemes such as the UK's Future Fund, in which we played a leading role in advising the UK government. In our view this focus, and approach could be the lifeline that many biotechs need over the coming 12-18 months in order to emerge on the other side of this crisis in a position to bring their innovative and potentially life-saving technologies to the market.

It might also be worth considering other platforms such as OBN Ventures (OBNV), as an alternative source of funding, particularly to provide match funding to compliment the various government schemes mentioned in this article. If you would like to know more about OBN Ventures then please visit <https://obn.envestry.com/>

Colin McCall, Adrian Toutoungi and Josef Fuss – Partners at Taylor Wessing ■

Accompanying your journey from cradle to liquidity

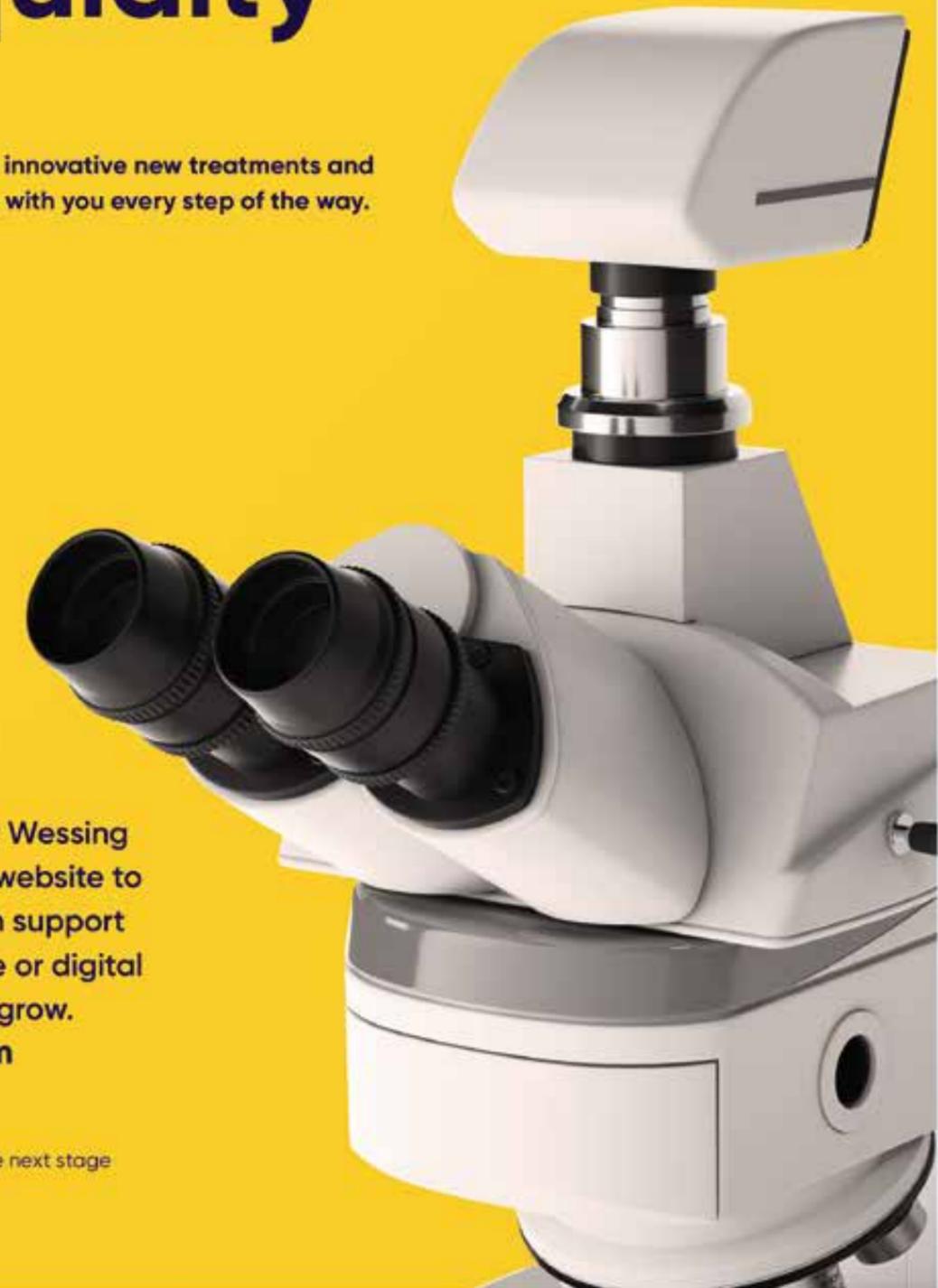
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CONSISTENCY IN INNOVATION



The world is rapidly attempting to find solutions to the myriad of challenges caused by the COVID-19 crisis, and nowhere else is this more true than across the Bruntwood SciTech network.

Life science and tech businesses across Manchester, Cheshire, Birmingham, Leeds, and Liverpool have shifted and refocused their priorities in order to support the national effort in the fight against the pandemic.

Firstly, back in March, Alderley Park-based Medicines Discovery Catapult (MDC) were approached by the UK government to coordinate the establishment of the national megalabs for testing COVID-19. Within 3 weeks, the Medicines Discovery Catapult had established one of three national 'Lighthouse Lab' testing centres creating the biggest network of diagnostic testing facilities in British history. Building on the success of the Lighthouse Lab, a new Validation Centre of Excellence for diagnostics, biomarkers and complex medicines will be established at Alderley Park, supported by £5m from the government's Getting Building Fund.

The 'research' phase of the government's action plan aimed to better understand the virus and saw Alderley Park-based Peak Proteins supporting the race for treatments, working in close collaboration with Medicines Discovery Catapult and Retrogenix to identify target receptors for COVID-19 and further driving understanding of the virus.

At Citylabs, located on Manchester University NHS Foundation Trust's campus, businesses have been using their world-class facilities to manufacture COVID-19 tests. International molecular diagnostics company, Yourgene Health signed a contract with Novacyt - a specialist in clinical diagnostics, to support the production of tests, as well as expanding its lab capabilities to support the surrounding NHS Trust hospitals.

Collaborations have also really come to the fore over the last few months; at Alderley Park Stream Bio have teamed up with MIP Diagnostics on a rapid diagnostic and mass screening test for COVID-19, whilst at Manchester Science Park, global molecular diagnostics company QIAGEN, in partnership with fellow campus member Affinity Biomarker Solutions and the University of Manchester have been supporting patient testing on high-throughput automation platforms; allowing labs to perform many and continuous PCR-based tests while continuing to research and create new commercial tests for patients who need them urgently.

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But it's not just life science companies that have been contributing to the fight against the pandemic. Many digital and tech businesses from across the Bruntwood SciTech network have been adapting and utilising their online platforms and tech for good.

Dacey Tech have been supporting the NHS in their call for more PPE, using their 3D printing facilities to create vital face shields for NHS workers; as have Innovation Birmingham-based Barclays Eagle labs and Energym using their machines around the clock to produce as many as possible. At Alderley Park, CRUK and Blueberry Therapeutics have also been producing much needed PPE. What's more, our Citylabs team have supported the MFT Charity to store, package and deliver care packages for frontline NHS workers, with over £500,000 worth of goods being donated to the cause from UK businesses keen to help.

At Bruntwood SciTech, we're proud to enable and facilitate collaboration; supporting some of the UK's most innovative minds who are adapting and coming up with new ideas every day to support the fight against COVID-19. From testing to tech, one thing is consistent during these ever-changing times: innovation continues. ■

Bruntwood SciTech has unique experience in creating and developing strategic partnerships with UK regional cities, universities, and NHS Trusts to drive economic growth through investment in science and technology infrastructure.



About Bruntwood SciTech

Bruntwood SciTech is the UK's leading developer of innovation districts, creating the environments and ecosystems for science and technology businesses to form, scale and grow.

A 50:50 joint venture between leading property company Bruntwood and Legal & General, Bruntwood SciTech provides high quality office and laboratory space and tailored business support, offering unrivalled access to finance, talent and markets, an extensive clinical, academic and public partner network and a sector-specialist community of over 500 companies.

Bruntwood SciTech has unique experience in creating and developing strategic partnerships with UK regional cities, universities, and NHS Trusts to drive economic growth through investment in science and technology infrastructure.

Bruntwood SciTech has a portfolio of over 1.8m sq. ft including Alderley Park in Cheshire, Platform in Leeds, Innovation Birmingham, a cluster in the heart of Manchester's Oxford Road Corridor innovation district - Manchester Science Park, Citylabs 1.0 & 2.0 part of the Manchester University NHS Foundation Trust (MFT) campus and Circle Square - a joint venture with Vita Group and a development pipeline of 850,000 sq. ft which includes Birmingham Health Innovation Campus.

A CONNECTED SCIENCE AND TECH ECOSYSTEM



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A week in the life of...

We would like to welcome our new OBN Corporate Sponsor, AggioSergeant, who joined in November this year.

AggioSergeant is an international boutique retained search firm that has been delivering life science leadership and connecting extraordinary businesses to outstanding people for more than 30 years. Working globally, they have an unparalleled network within the life science community and offices in California, the UK, and the EU.

OBN invited Victoria Sergeant, CEO of AggioSergeant, to introduce themselves to the OBN Network, and share a 'week in the life' of their busy team...



Victoria Sergeant
CEO, AggioSergeant



"Last month was black history month, and my team attended many diversity and inclusion webinars, focused on expanding our network, and then this month joined Race Equality Matters as a sponsor (www.raceequalitymatters.com).

Our internal discussion centred on our stakeholders, clients, candidates, and employees, as well as our own company's values and how we should visibly and credibly exhibit our values.

As a team, we have spent the last ten years doing what we can to advocate promoting women into the C-Suite and the Board Room, with some success. Angel/Seed Investors have done better. An example being Cambridge Angels, whose investment portfolio has a very solid percentage of women CEOs and Board Directors. Andy Richards, a founding member of Cambridge Angels and an entrepreneur

Our internal discussion centred on our stakeholders, clients, candidates, and employees, as well as our own company's values and how we should visibly and credibly exhibit our values.

and investor with an established track record in founding and scaling up innovative Biotech and Healthtech companies in the UK, has stepped onto his pulpit, with his usual humour and grace, and has a simple explanation for their excellent statistics: "It's the right thing to do".

Race Equality Matters is also focusing on racial diversity as being the right thing to do. They are looking for Allies to take action while the events of this year are fresh in our minds, and are supplying the education and skills to make educated action an intrinsic element of good corporate governance (Dr Karl George at

www.karlgeorge.com is an expert on this). To this end, as an individual or a company in the life sciences, we would urge you to join Race Equality Matters and to celebrate Race Equality Week on February 1st, 2021.

This year, as an industry, we have celebrated Jennifer Doudna and Emmanuelle Charpentier winning the Nobel Prize for Chemistry. To quote Dr Faith Uwadiae, Postdoctoral Researcher at The Francis Crick Institute: "I can't wait until I'm no longer waiting for the first Black scientist to win a Nobel Prize". ■

"I can't wait until I'm no longer waiting for the first Black scientist to win a Nobel Prize"



For further information please contact:
Victoria Sergeant CEO, AggioSergeant
Email: vs@aggiosergeant.com Mobile: 07876 310 001

PROVIDING SCIENCE AND TECHNOLOGY FACILITIES IN CHALLENGING TIMES

In all our businesses, the way we work has been changing and evolving for many years, and so have the associated workspaces. Take a look at how Bulb Consulting can support your business.

The current COVID-19 pandemic has accelerated the rate of change to an unimaginable level & left business wondering whether more flexible working will become the new norm.

Even the most reluctant of adopters of new ways of working are being forced to embrace the rate of change.

The situation is still however fluid. We may have to wait and watch the unfolding situation and follow upcoming trends, but as Laboratory Design and Delivery Specialists, we have already been reacting to significant changes in the typical client needs.

We fitted out our first laboratory ten years ago.

Since then, it has been an inspiring journey interspersed with new learning, challenges, and achievements.

Integral to this journey has been our dedicated team, a range of brilliant clients, supportive suppliers, and enthusiastic partners.

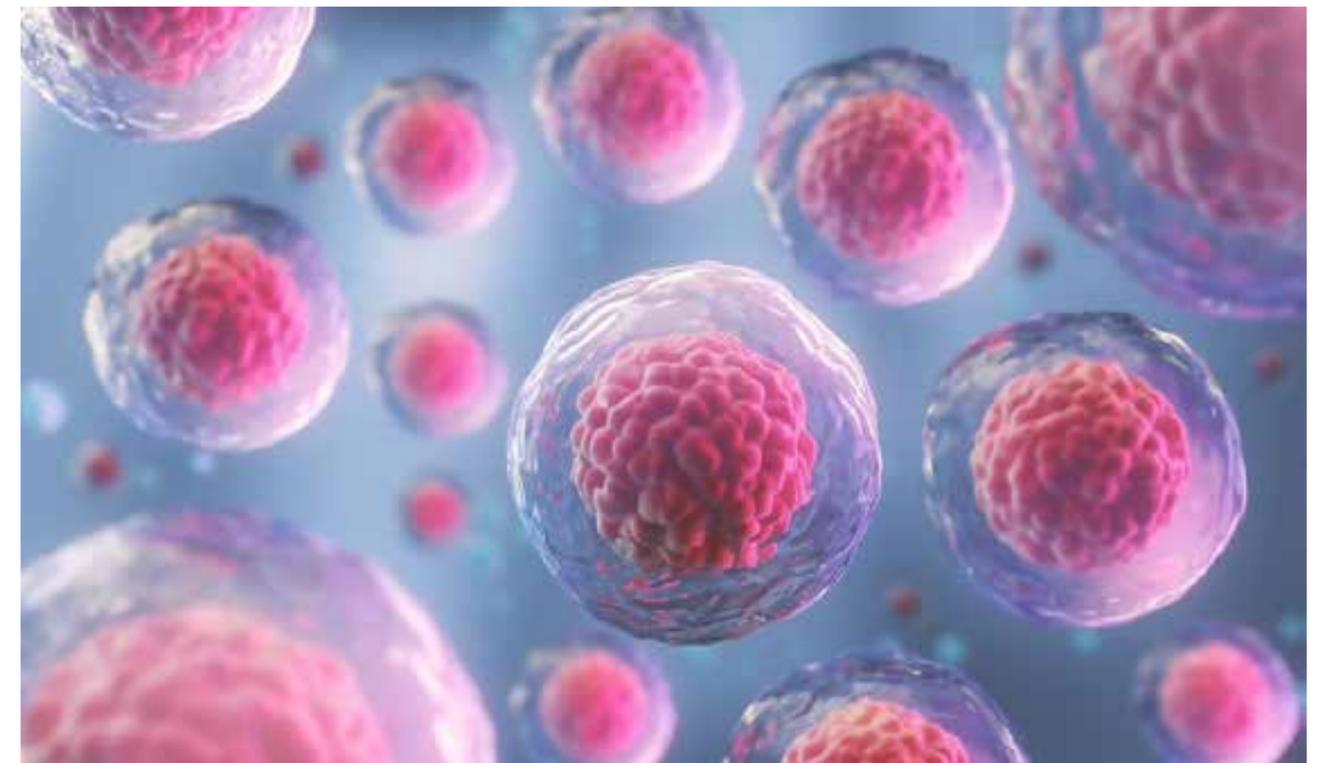
We have enjoyed meeting and working with fascinating scientists whilst marvelling at their outstanding vision, their monumental

effort and remarkable determination to help humanity.

The new coronavirus and the increasing rate of infection has highlighted the importance of healthcare, scientific research, and the undisputed role of technology.

At the forefront of this global battle are the key industries of life sciences, diagnostics, basic research, manufacturing, and emerging industries based on AI and machine learning. As a result, we have seen the demand for wet and dry laboratory spaces rapidly increase.

We are receiving many enquiries from property professionals, and investors seeking advice on a wide range of prospective buildings potentially involving; office to laboratory conversion, laboratory upgrades (from BSL1 to BSL 2 or 3), a laboratory change of use (chemistry to biology & vice versa) or the creation of laboratory & engineering designs for use in agreeing base building



adaptions for a building pre-let. Most projects are unique to the client's specific scientific needs both for today and as predicted for the future.

Reduced use of available desk space, cellular offices, meeting rooms, and the promotion of more collaboration areas are prompting landlords & property professionals to anticipate reduced office demand & consider re-purposing the non-lab space to meet the increased demand in life sciences.

At Bulb, we are passionate about making our small contribution to the Science & Technology sector.

Towards that goal, we are launching a new expanded service, BULB CONSULTING to help property professionals, investors, science &

technology leaders, and laboratory occupiers in delivering their innovative facilities, fit for purpose.

Over the past 10 years, our experienced team have delivered projects in pharmaceutical environments (achieving compliance with the current Good Manufacturing Practices); biotechnology (Cell & Gene Therapy, bioengineering, Tissue Culture); drug discovery automation; chemistry (synthesis, analysis), containment labs (CL1-CL3); cleanrooms (ISO, GMP), manufacturing & production units, laser labs, in-vitro & in-life facilities, medical devices development, quantum computing, list X facilities) and so on.

Whatever the client needs, whether, in science, technology, or healthcare, we feel confident of adding value to that process. ■



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THE BIOTECH BULLDOG



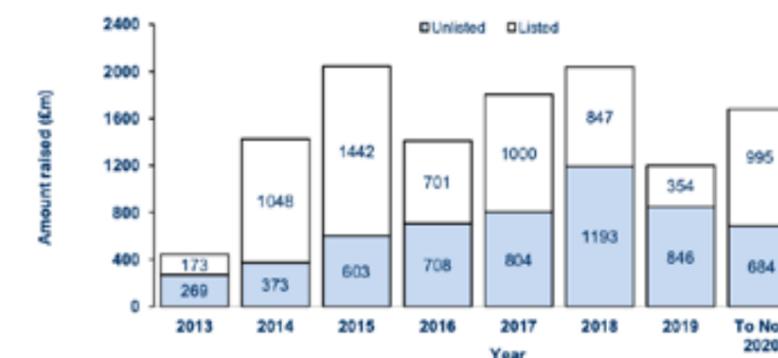
COVID – A broad-brush assessment of where we are and what lies ahead for the UK industry in terms of financing and strategy

As we enter the 'third' phase of Lockdown, with only Cornwall and the Isle of Wight in Tier One, it is appropriate to take a look at the current and longer term impact of COVID on the UK Life Sciences landscape. Whilst the media lauds the prospects of an imminent vaccine to return us to 'normality', it seems unlikely that a vaccination programme will make a significant impact until the end of 2021 at the very earliest. Until this point, continuing domestic and commercial volatility looks likely to result from further indecision and lack of a coherent strategy with regard to COVID control. Many questions remain, not least of which are the accuracy (and false positive rate) of current testing and subsequent impact on the perception of risk. In addition, questions are increasingly being asked about the ability of the NHS to operate effectively in therapeutic areas outside of COVID, and the current and longer-term indirect costs of COVID. Even if COVID-based restrictions are eventually reduced, the impact of the outbreak is likely to continue to be felt across industry in general into 2022.

The impact of COVID on Life Sciences finance is relatively simple to assess. Broadly speaking, since the beginning of 2020, the UK industry has been a net beneficiary of the COVID outbreak. Whilst funds raised year to date have fallen for private, unlisted companies (in part due to the difficulties of due diligence during lock down), there has been a rush of investment into listed, publicly traded, life science companies. At the end of 2019 many were of the view that the UK public markets for the small-to mid-cap listed sector was on its knees, with a lack of specialist investors for the sector, a limited number of analysts and a rush amongst UK companies to list on NASDAQ. However, data provided by Akesios Associates (see Chart), indicates that funds raised in the public markets year to date are already nearly triple those raised over 2019. It is credibly postulated that this is a direct result of COVID with the desire to increase investment in potentially (and now more visibly so) life-saving companies given a boost. The simplest (and fastest) way to invest in the sector during Lockdown has been via the public equity markets. In comparison, a rapid shift of investment into smaller companies is more difficult, particularly give the impact of COVID on the rate of effective due diligence. A number of UK companies, both large and small, have benefited by their proactivity in addressing COVID (GSK, AstraZeneca, Vaccitech, Oxford BioMedica and Synairgen to name but a few). Fundraising for some smaller UK companies has undoubtedly been assisted by their COVID-based foci.

Going forward, and in a post-COVID UK environment, one would expect to see this trend to some degree reversed, as investors again choose private companies, with usually M&A-based liquidity events (and sometimes a NASDAQ listing), versus UK public companies offering value accretion in what may be uncertain market conditions. Importantly, it is unlikely, in a post-COVID UK, that the Life Science public markets will see (i) higher levels of liquidity, (ii) better quality equality equity research, and (iii) a rush amongst institutional investors to buy Life Science stocks. As such, in the absence of a potentially higher value M&A transaction, NASDAQ will likely remain the market of choice for UK IPOs.

Funds raised by small to mid-cap UK life science companies, 2013 to November 2020



Note: Funds exclude those raised by NASDAQ listings/ issuance of ADRs and funds raised in the US for US operations. As such figures represent funds raised by UK companies operating in the UK and/or UK capital markets only.

Data kindly provided by Akesios Associates Limited



The UK's already parlous cancer and cardiovascular survival rates are likely to be significantly impacted, as detailed in recent BMJ and Lancet papers.

At the moment SPACs appear to be capturing interest as an alternative method of US listing and not just, as historically was the case for 'distressed' or 'unusually capitalised' companies. However, depending on the performance of companies that have utilised this method (such as, for instance, 4D Pharma) it is unlikely that this trend will prove so attractive in a post-COVID environment.

Operationally COVID has presented a plethora of hurdles for the UK Life Sciences industry. Lockdown has generally resulted in reduced prescription rates and cancellations/delays to both diagnoses (such as endoscopy, colonoscopy, cystoscopy, CT and MRI scanning) and elective surgical procedures. The UK's already parlous cancer and cardiovascular survival rates are likely to be significantly impacted, as detailed in recent BMJ and Lancet papers. It will be interesting to see if countries with normally much higher survival rates (of which there are many) are impacted to the same degree. Whilst in some cases additional government funding has been allocated to address these shortfalls, it is unlikely that cash alone will alleviate the impact of delays, particularly if COVID-related complications

serve to increase the burden on existing healthcare systems. Whilst confirmation bias, and indeed naked politics, may play a role in the search for, and identification of, longer-term COVID risks, it would appear that the COVID virus is relatively 'unusual' in terms of associated complications and longer-term risks. An insightful piece of analysis by SVB Leerink described the virus as 'almost perfectly optimized for human survival and spread' (SIC). Increased morbidity, mortality and complication rates amongst the obese is not helpful, particularly given increasing prevalence of obesity in Western society, and particularly high rates in certain ethnic groups. Relatively low rates of obesity in China (c 6.2%) may have helped that country's fairly rapid recovery compared to elsewhere (we note obesity prevalence c36.2%, c27.8%, 22.3%, 21.6% for the US, UK, Germany and France respectively). There is considerable speculation regarding the likelihood of increased levels of mental illness in a post-COVID societies scarred by lockdown. The UK's Guardian believes that nearly one in five COVID patients are likely to be subsequently diagnosed with a mental illness. Such media coverage, often playing to popular sociopolitical themes, highlights the tendency of such speculations to be somewhat dramatic, whilst credible confirmation of such forecasts is awaited. It has been noted that that diagnosis rates will likely be highest amongst those with concurrent conditions – i.e. those most aware of COVID threat (i.e. the obese) and/ or those most visible to the healthcare system anyway (i.e. the elderly). In contrast, most individuals infected by COVID remain asymptomatic and undiagnosed. Regardless, COVID is likely to drive not only the market for better vaccines, but also diagnostics, direct therapies and potentially new future treatments to address possible longer-term health consequences of infection. The full impact on the industry is difficult to assess, but it is probable that there will be an increased demand on healthcare systems, payers and new therapies over the

mid-to-long term, together with a higher awareness of the positive role played by the Life Science Industry by both the government and the public at large. Any further 'emerging infections' (increasingly probable) will likely accentuate these demands.

COVID has also had a profound impact on the operating activities of the UK Life Science sector. In addition to reduced prescriptions, and procedures, driving a decline in sales (NB: a net reduction in sales across the industry is reliably forecast for 2020), logistics networks have also been hard hit, with shipments delayed and confounded by an inability to map and match varying demand to unpredictable supply, accentuated by a lack of accurate contextual and actionable visibility both upstream and downstream. Key areas of concern include the decline in demand for non-COVID related material (as prescription rates fall), a loss of manufacturing capacity (impacted by illness and furlough, an increase in individual patient demand (often attempting to bypass regular, but obstructed, channels such as GPs), a loss of transportation capacity (particularly internationally), interruption in raw material supply, a disruption of multitier visibility (i.e. supply chains with multiple components) and a lack of accurate indicators of future demand. As such both demand, and in many cases manufacturing efficiency reliant on the delivery of third-party API/components, have been significantly reduced. These logistical constraints could also hamper distribution of COVID vaccines. IATA commented that if everyone in the world received a single dose of vaccine (an ambitious proposition) 8,000 'Jumbo Jets' would be required for shipment. A curious statistic but nevertheless informative, particularly if one also considers the need for Cold Chain delivery (of a particularly challenging format for Pfizer's mRNA vaccine). It's worth noting that airport operator Fraport (which operates Frankfurt International Airport) is preparing to open another 6,500 sq ft for pharma logistics, whilst pharmaceutical freight firm Yusen Logistics has opened a new branch in Sunderland, UK, designed specifically for COVID-19. However, from a UK perspective COVID-based hurdles must now also be combined with potential fall-out from completion of Brexit. Many UK manufacturers are already busily stockpiling in expectation of severe logistical delays and even failure, combined with changes in border control and non-tariff barriers. Fractures

in regulatory alignment are likely to further complicate these challenges.

So, in these difficult times what light is on the horizon? Addressing COVID first there is a clear need not only for an effective vaccine and vaccination strategy, but furthermore for a considered and workable set of measures that supports both inoculation and publicly acceptable, logical and workable 'protective' measures amongst the population at large, as the UK hopefully emerges from the current controversial 'Lockdown' approach. A monolithic 'Science-led Approach' requires expansion to incorporate broader, more holistic, and more importantly consistent and acceptable strategic components. Investment in workable and equitably acceptable strategies will likely prove invaluable if, and when, the UK faces further challenges from new emerging diseases. These will happen, and we are now in a position to learn from the current crisis and plan ahead. Investment in, for instance, more localized (versus regional) disease monitoring and control infrastructure will be worth its weight in gold when the next emerging infection strikes. Moreover, such preparations will help safeguard against further societal and economic damage resulting from future infections.

As such 'normality' as it was known post-COVID is unlikely to return, and if it does the UK will merely be failing in its duty to prepare for future infections. Preparative measures are likely to require a collaborative effort from multiple parties, with a vital

Preparative measures are likely to require a collaborative effort from multiple parties, with a vital contribution played by the UK Life Science industry.

contribution played by the UK Life Science industry. Preparations such as the accelerated development of VMIC (Vaccines Manufacturing Innovation Centre), the instigation of the Joint Biosecurity Centre (JBC) and the development of a 'Health Intelligence Framework' are all positive indicators. Other initiatives include a call for the creation of a Global Corona Intelligence Analysis Center (GCIAC) and the suggested creation of a UK version of DARPA (Defense Advanced Research Projects Agency – the remit of which encompasses infectious disease). It is likely that further developments offering direct benefit to UK companies (i.e.

i) Maringe, C. et al. (2020) The impact of the COVID-19 pandemic on cancer deaths due to delays in diagnosis in England, UK: a national, population-based, modelling study. *The Lancet Oncology*; 21 (8); 1023-1034.

ii) Hanna, T.P. et al. (2020) Mortality due to cancer treatment delay: systematic review and meta-analysis. *BMJ*; 371 doi: <https://doi.org/10.1136/bmj.m4087> (Published 04 November 2020)

iii) Mafham, M.M. et al. (2020) COVID-19 pandemic and admission rates for and management of acute coronary syndromes in England. *The Lancet*; 396 (10248); 381-389.

Look out for the Biotech Bulldog's report in our next issue of CONNECT



further incubators; additional funding) will become available. Individuals within the UK industry are well positioned to support these efforts, although (particularly given recent experience) great care must be taken to maintain transparency of appointments, avoid real or perceived conflicts of interest, and ensure that credible accusations of self-interest and/or cronyism/ nepotism cannot be credibly levelled. Some of the existing, long-established, circles of influence within the UK industry suggest that these sensible precautions may prove at best challenging. On a shorter-term basis the increased profile of the industry heralds a more positive view by the general public and investors alike (pending a low incidence of adverse events resulting from the (rapid) deployment of a COVID vaccine – significant vaccine adverse events could have a long-lasting and highly damaging impact amongst a general public that is unaware of the risk of regulatory approval based on *relatively* limited data), and as such the finance environment should remain at least stable, albeit with continuing focus on NASDAQ for public listings. We note that the current National Security and Investment Bill (NSIB) currently before Parliament may place limits on M&A aspirations whose activity is deemed critical to Britain's national security.

Therapeutics such as some vaccines may be included within this remit. Similarly, in terms of collaboration, or even sources of funding, the world may become a slightly smaller place for some UK companies. Given the level of investment made into the UK sector so far it will be interesting to see whether any commercial prohibitions may be placed on deals with States such as China. However, it is hoped that such restrictions may be at least offset by an increase in regulatory or financial assistance for programmes deemed in the 'National Interest'. It is possible that post COVID there will be increased opportunities for (responsible) accelerated regulatory processes ahead of approval, and potential Governmental involvement/ funding for innovative and 'stockpile' therapeutics. It is likely that future innovations will encompass development, manufacture and delivery of product. Operationally fragile logistical networks need to be made more resilient, and at the UK national level the NHS, or hopefully evolved version, optimised for increased preparedness. Whilst the next 6-24 months are likely to be challenging, the outlook for the UK industry remains generally upbeat, providing commercial agility, ongoing innovation and good governance all remain 'front and centre'. ■



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OBN's Corporate Membership of 400-plus organisations includes many R&D companies (therapeutic, medical technology and diagnostics) as well as an extensive range of contract research (CRO) and manufacturing (CMO) organisations, companies in the associated industries and specialist suppliers.

The listing below shows our Member companies arranged by sector.

Therapeutics Discovery and Development

Absynth Biologics

www.absynthbiologics.co.uk

Discover and develop vaccines and antibodies to prevent and treat bacterial infections

Activatec

www.activatec-bi.com

Focus on the evaluation of processes for the manufacture of active biobased compounds and ingredients for nutraceutical and cosmetics products from currently unused and low-value organic sources

Adaptimmune

www.adaptimmune.com

A clinical-stage biopharmaceutical company focused on the development of novel cell-based cancer immunotherapy products

Antikor Biopharma

www.antikor.co.uk

Developing innovative antibody fragment-drug conjugates for improved tumours treatments. The company's proprietary lysine-based conjugation platform, OptiLink™, enables high payload loading of the antibody fragment, more effective penetration of tumours and rapid clearance from normal tissue

Antiverse

www.antiverse.io

Developing an AI driven antibody discovery platform to predict antibody-antigen binding and provide antibody drug candidate selection

Arecor

www.arecor.com

Developing a portfolio of proprietary products that will enable improved treatments for diabetes via the reformulation of approved proteins and peptides

Ascension Healthcare

www.ascension.co.uk

A clinical-stage biopharmaceutical company focused on developing and commercialising innovative therapies for the treatment of haemophilia and osteoarthritis

BenevolentAI

www.benevolent.ai

Focus on bringing together artificial intelligence technology and scientific research to enable more rapid creation of better medicines

Bioarchitech

www.bioarchitech.com

Developing oncolytics viruses for cancer treatment

Blueberry Therapeutics

www.blueberrytherapeutics.com

A drug discovery and development company, engaged in the development of therapies to treat infectious and inflammatory diseases

Carocell Bio

www.carocellbio.com

Carocell Bio is developing novel combination medicines for serious inflammatory conditions, including atopic dermatitis, inflammatory bowel disease and burns

Celixir

www.celixir.com

A regenerative medicine company that discovers and develops life-saving and life-altering regenerative medicines for patients with the greatest medical need

Celleron Therapeutics

www.cellerontherapeutics.com

Developing new cancer drugs, Celleron's preclinical pipeline consists of a series of target enzymes involved in control of epigenesis with key roles in cancer biology

CHAIN Biotechnology

www.chainbiotech.com

A pre-clinical microbiome therapeutics company aiming to create therapies for infectious disease and for immuno-oncology applications based on their proprietary and highly differentiated bacterial drug development platform for delivery to the large intestine.

Chronos Therapeutics

www.chronostherapeutics.com

A CNS specialist company developing therapeutics for degenerative and behavioural diseases of the brain and nervous system

CN Bio Innovations

www.cn-bio.com

Develops human organ-on-a-chip technologies and devices that enable the formation of miniature models of human organs which can be used in the drug discovery and development process

Creoptix AG

<https://www.creoptix.com/>

Provides technologies and expertise for gathering data on a wide range of biological interactions including to detect and quantify biological interactions in real-time, providing both binding affinity and kinetics

Crescendo Biologics

www.crescendobiologics.com

An oncology-focused drug discovery and development company using its proprietary Humabody™ VH technology to develop novel targeted T-cell engaging therapeutics

Cumulus Oncology

<https://www.cumulusoncology.com/>

Cumulus is developing novel anti-cancer therapies

CytoSeek

www.cytoseek.uk/

CytoSeek's mission is to use cell membrane augmentation technology to unlock the potential of next generation cell therapies for cancer, heart disease, osteoarthritis and diabetic wound healing

DJS Antibodies

www.djsantibodies.com

Discovery and development of functional antibodies to GPCRs

Eli Lilly & Company

www.lilly.co.uk

A research based global pharmaceutical company with diverse interests including oncology, neuroscience and diabetes and related complications

Emergex Vaccines Holdings

www.emergexvaccines.com

Developing a new approach to vaccine development in order to address some of the immediate health threats, such as Zika, Ebola, pandemic flu and antibiotic resistant bacteria

Enara Bio

www.enarabio.com

Exploiting novel insights into the expression of human endogenous retroviruses in different cancers to develop a pipeline of first-in-class cancer vaccines

Enesi Pharma

www.enesipharma.com

A clinical-stage pharmaceutical company focusing on the development of solid dose vaccines and other injectable solid dose drug-device combination products

Epsilon (formerly IGEN Therapeutics)

<https://igemtherapeutics.com>

An immuno-oncology company focused on developing immunoglobulin E (IgE) antibodies to treat cancer. The lead product for ovarian cancer is in Phase 1/2

e-Therapeutics

www.etherapeutics.co.uk

A drug discovery company with a proprietary computational drug discovery platform based on advances in network pharmacology and chemical biology

Evox Therapeutics

www.evoxtherapeutics.com

A biotechnology company focused on harnessing and engineering the natural delivery capabilities of exosomes to develop an entirely new class of therapeutics

Exonate

www.exonate.com

Developing drugs that modulate alternative mRNA splicing to address diseases of high unmet medical need with an immediate focus on alternative splicing of VEGF to treat wet Age-Related Macular Degeneration (wAMD) and Diabetic Macular Oedema (DME)

Exscientia

www.exscientia.ai

Applying its proprietary AI platform to big data to accelerate the drug discovery and design process

Fast Biopharmawww.fastbiopharma.com

Established to address new targets in immuno-oncology. The company's lead product is an optimised antibody against a key oncology target

Grey Wolf Therapeuticswww.greywolftherapeutics.com

Develops immunotherapies that illuminate non-responsive tumors for destruction by the immune system. The company is developing small molecules to target ERAP1 and 2, targets of growing academic interest for multiple cancers

GyreOx Ltdwww.gyreox.com

GyreOx's proprietary discovery platform creates unique 'Gyrocycle' highly modified macrocyclic peptides, which combine the target-engagement power of biologics with the cell-entry ability of small molecules

Haemostatixwww.haemostatix.com

Developing and commercialising active clotting agents/haemostats for the control of bleeding

Hairclonewww.hairclone.me

Working to develop hair rejuvenation and regeneration treatments

HOX Therapeuticswww.hoxtherapeutics.com/

Developing novel treatments for cancer through targeting HOX family proteins which frequently have aberrant biological activity in tumours

ILC Therapeutics (formerly Alfacyte)<https://www.ilctherapeutics.com/>

Focused on developing new treatments for cancer, atopic dermatitis and psoriasis using novel peptides that modulate the innate immune system

Imophoronwww.unitdx.com/novel-vaccine-technology-interview-fred-garzoni-imophoron

Developing a novel vaccine platform for use on emerging infectious diseases. The platform is based on a single component of the human Adenovirus that spontaneously forms a superparticle, the ADDomer

Innaxon Therapeuticswww.innaxon.com

Working in the area of innate immunity and has lead products in cancer and inflammatory disease. These are the Toll-like Receptor 4 (TLR4) agonists (Dendrophilin® and Novo-Pyrexal®) and an in-licensed small molecule inhibitor (an IAXOTM compound)

Ipsen Bioinnovationwww.ipsen.com/uk/

A global pharma company with three main areas of focus: oncology, neurosciences and rare diseases

Kalvista Pharmaceuticalswww.kalvista.com

A pharmaceutical company focused on the discovery, development and commercialisation of small molecule protease inhibitors as new treatments for hereditary angioedema (HAE), diabetic macular edema (DME), and other plasma kallikrein-associated diseases

Karus Therapeuticswww.karustherapeutics.com

Designs and develops small-molecule drugs that combine targeted therapy and immunotherapy activity for the effective treatment of a diverse range of solid and hematological cancers

Locate Biowww.locatetherapeutics.com

A specialist regenerative medicine and device company which has developed TAOS™, a patented platform polymer technology with multiple medical applications

Macrophage Pharmawww.macrophagepharma.com

An immuno-oncology company focused on the discovery and development of novel therapies designed to enhance anti-tumour immune responses

Macrophox

A newly founded company engaged in research and experimental development on biotechnology

metaLinearwww.metaLinear.co.uk

metaLinear is active in discovering novel targets for anti-bacterial drugs and antibiotic re-sensitisers through proteome engineering

MiroBio<http://www.mirobio.com/>

A 2019 OUI spinout working on treatments for autoimmune and inflammatory disorders

Mironid<https://www.mironid.com/>

Developing new medicines for degenerative kidney diseases, chronic inflammatory diseases and cancer

Nanomericswww.nanomerics.com

Mainly develops drug delivery solutions for poorly water soluble drugs, nucleic acids and peptides using proprietary pharmaceutical nanotechnology

NanOptima**None**

A biotechnology startup based in Alderley Park BioHub developing novel formulations that include peptidic hydrogel and/or nanoparticle technologies to improve ophthalmic drug delivery

NestTeckwww.biocity.co.uk/company/nestteck/

Developing environmentally responsible antimicrobial and insecticide technologies for a range of industrial and consumer applications, including the veterinary, industrial and healthcare sectors

Neuro-Biowww.neuro-bio.com

Involved in drug discovery and development in the area of degenerative brain disease. Their unique strategy has produced a novel 14 amino acid bioactive peptide (T14) derived from the C terminus of AChE. T14 is neurotoxic in the adult brain and published data shows it to be a potential key driver of neurodegeneration

NeurocentRx Pharmawww.neurocentrx.com

Focused on developing medicines to alleviate severe and chronic neuropathic pain experienced by cancer patients

Novo Nordiskwww.novonordisk.com

A global pharma with diverse interests particularly in the area of diabetes and associated diseases

Nucleomewww.nucleome.com

Developing therapeutics based on a proprietary 3D nuclear architecture and AI powered computational genomics drug discovery platform

NuVision Biotherapieswww.nu-vision.co.uk

Established to commercialise biotherapies for treating 'front of the eye' disease and trauma

Ochre Biowww.ochre-bio.com

Developing genomic medicines to reprogramme liver metabolism

OMass Therapeuticswww.omass.com

Focused on structural mass spectrometry to discover novel medicines

Orbit Discoverywww.orbitdiscovery.com

Utilises its proprietary display platform to identify robust peptide drug candidates for internal industry drug discovery programs and via collaborative research

Ossianixwww.ossianix.co.uk

Developing biotherapeutic products based on the single domain VNAR antibody from the shark. Current programs focus on autoimmunity, neurodegeneration, ALS, pain and botulism

Oxford BioMedicawww.oxb.com

A gene and cell therapy company focused on developing life changing treatments in the areas of oncology, ophthalmology and CNS disorders

Oxford Stemtech<https://www.oxfordstemtech.com/>

Developing innovative approaches to produce induced pluripotent stem cells for research

Oxford Vacmedixwww.oxfordvacmedix.com

Developing therapeutic agents for the treatment of cancer based on Recombinant Overlapping Peptides (ROPs)

Oxgene<https://www.oxgene.com/>

Developing a range of technologies to enable precise and robust mammalian cell engineering to enable more rapid development of gene therapies, antibody-based therapeutics and CRISPR / gene editing

OxSonics Therapeuticswww.oxsonics.com

Developing an ultrasound based platform to enhance the delivery of anti-cancer agents to tumours by disrupting the structure of the tumour

OxStemwww.oxstem.co.uk

A drug discovery company with the vision of developing in-situ cell re-programming therapies to treat dementia, heart failure, macular, diabetes and oncology

Oxularwww.oxular.com

Developing novel retinal treatments engineered to access specific small spaces in the eye and to provide unique drug distribution to tissues specifically involved in retinal diseases

Pathios Therapeuticswww.pathios.com

Pathios Therapeutics is an early-stage drug discovery company pursuing novel small-molecule drugs that target acid-sensing GPCRs on cells of the adaptive and innate immune systems

Pedanius Therapeuticswww.pedaniustherapeutics.com

Developing RNAi therapies for Gram-negative bacterial infections

PepGen**None**

Developing cell-penetrating peptides for treatment of muscular dystrophies

PharmaKrystowww.pharmakrysto.co.uk

Developing new therapeutics to save kidneys and prevent pain in people with cystinuria

Phylo Biosciencewww.phylos.bio

A plant biotech company aiming to apply genomics and statistics to revolutionise the future of cannabis

Platelet Serviceswww.plateletservices.com

Provides products and services for platelet function testing which are useful for diagnosis of abnormal bleeding and to monitor platelet function in those who are at-risk of cardiovascular events

Polymaths AItwitter.com/polymathsai

An Oxford University spinout developing and providing AI augmented model-informed drug discovery and development services

Precision Medicineswww.precimed.com

Focuses on in-licensing innovative drug candidates which are undergoing or have already completed initial clinical testing for the treatment of various forms of cancer and then seek to further develop these drug candidates for commercial use

Precision NanoSystemswww.precisionnanosystems.com

Working on the discovery, development and manufacture of novel nanoparticle medicines

ProFactor Pharmawww.profactorpharma.com

Develops, commercialises, and supplies recombinant blood factors for treatment of haemophilia

PsiOxus Therapeuticswww.psiexus.com

Focused on discovering and developing gene-based immuno-oncology treatments for solid tumors using its proprietary intravenously administered T-SiGN virus platform

Redx Pharmawww.redxpharma.com

Focuses on the development of small molecule therapeutics in particular for cancer and fibrosis

Replimunewww.replimune.com

Develop novel, proprietary oncolytic immunotherapies intended to improve both the direct anti-tumor effects of selective virus replication and the potency of the immune response to the tumor antigens released

Rexgenerowww.rexgenero.com

Developing autologous cells therapies with a focus on peripheral vascular disease

Sarepta Therapeuticswww.sarepta.com

Developing breakthrough therapies to treat genetic disease with a focus on muscular dystrophies and Charcot-Marie-Tooth

Scancellwww.scancell.co.uk

Scancell is focused on the development of cancer immunotherapies and has a number of products in clinical development and a range of products at an earlier stage

Sigma Aldrich/Merckwww.sigmaaldrich.com

A leading global life science and high technology company with their products being used worldwide to enable science that improves the quality of life

Silence Therapeuticswww.silence-therapeutics.com

An siRNA company with interests in diverse areas including beta – thalassemia, myelodysplastic syndrome and cardiovascular disease

Sitryx Therapeuticswww.sitryx.com

A biopharmaceutical company focused on regulating cell metabolism to develop disease modifying therapeutics in immuno-oncology and immuno-inflammation

Sporegen<http://sporegen.com/>

Sporegen is working on a number of products including the development of vaccines based on Bacillus subtilis

Summit Therapeuticswww.summitplc.com

Focus on the discovery, development and commercialisation of novel medicines for bacterial diseases

Theolyticswww.theolytics.com

A start-up biotech company focused on development of oncolytic viral therapies

TopiVert Pharmawww.topivert.com

Developing next-generation, Non-Systemic Kinase Inhibitors (NSKIs) as novel medicines for the treatment of chronic inflammatory diseases of the gastrointestinal (GI) tract and the eye

Twist Biosciencewww.twistbioscience.com

A synthetic biology company that manufactures and sells synthetic DNA-based products.

UCB Pharmawww.ucbpharma.co.uk

Dedicated to the research, development and commercialisation of medicines with a focus on the diseases of the central nervous system (CNS) and immunology disorders

Vaccines Manufacturing & Innovation Centrewww.vmicuk.com

VMIC is a not-for-profit research company within the national scientific infrastructure providing strategic vaccine development and manufacturing capability

Vaccitechwww.vaccitech.co.uk

Develop leading T cell-inducing vaccine products to improve global health. It is engaged in Phase 2 clinical programs for universal influenza and prostate cancer, Phase 1 for MERS, and preclinical programs for 3 other therapeutic infectious diseases indications

Valo Therapeuticswww.valotx.com

Developing cancer therapies using the PeptiCRAd (Peptide-coated Conditionally Replicating Adenovirus) platform which combines two clinically proven cancer immunotherapy approaches: an oncolytic Adenovirus and a peptide vaccine, to take advantage of the best features of both technologies

Vertex Pharmaceuticals (Europe)www.vrtx.com

Focused on the discovery and development of small molecule drugs for serious diseases. Has a very strong pipeline in cystic fibrosis but also has interests in pain and haemoglobinopathies

Viatemwww.birminghamresearchpark.co.uk/tenants/viatem-ltd

Aiming to develop the potential of peptimem, a short peptide, that plays a role in controlling inflammation

Medtech**Abingdon Health**www.abingdonhealth.com

A diagnostics group, working across multiple industry sectors, developing, manufacturing and commercialising lateral flow immunoassay tests and reader system internally and for contract customers

Accentus Medicalwww.accentus-medical.com

Develop novel surface technologies to address the challenges of implantable medical device design and performance

Accuneawww.accunea.com

A point-of-care diagnostics company which combines a small bedside bioanalytical system with artificial intelligence to enable the continuous and real-time monitoring of a patient's kidney function

Advanced Molecular Diagnosticswww.am-diagnostics.co.uk

A molecular diagnostics company that develops, manufactures and supplies molecular diagnostic instruments, kits and consumables

Anaphitewww.anaphite.com

Developing a nanomaterial ('Anaphite') that is a combination of graphene and anatase. The nanocomposite is a photocatalyst that can be used for air purification and battery technology

APA Parafrictawww.parafricta.com

A wound care company which markets a range of skincare products made from its proprietary, low-friction fabric, Parafricta®

Base Genomics Limitedwww.basegenomics.com

Developing the proprietary TAPS platform that generates both genetic and epigenetic information at base resolution. Multiple applications in diagnostics, patient monitoring and many other areas.

Blue Earth Diagnosticswww.blueearthdiagnostics.com

A molecular imaging diagnostics company focused on the development and commercialisation of novel PET imaging agents to inform clinical management and guide care for cancer patients

Cambridge Respiratory Innovations (CRiL)www.criltd.co.uk

Develop innovative medical devices to diagnose and manage respiratory conditions

Carbometricswww.carbometrics.com

Using proprietary Biomimetic Glucose Binding Molecules (GBM) to develop a new glucose sensor chemistry that will enable market-leading Continuous Glucose Monitors (CGM)

Cernotaswww.cernotas.com

Developing a new microbiology testing platform capable of determining the presence of microorganisms

DynamX Medicalwww.dynamxmedical.com

Developing a diagnostic system that distinguishes between cancerous and pre-cancerous tissues biopsies. The system combines commercially-available hardware with their patent-pending data analysis method to provide a rapid system for screening biopsies at the point-of-care

Edinburgh Molecular Imagingwww.edinimage.com

A clinical phase biotechnology company focused developing imaging agents that can be used to detect diseased tissue in real-time with the potential for use during interventional procedures including surgery

Endomagwww.endomag.com

Produce diagnostic technology for more effective breast cancer localisation within breast tissue and sentinel lymph nodes thereby help women with breast cancer avoid surgery when it isn't needed, and experience better outcomes when it is

Enlight Medicalwww.enlightmedical.com

Translate complex scientific ideas into eye-catching, easy-to-understand 3D animations, using state-of-the-art computer-generated imagery and virtual reality tools, to help you communicate the science behind your brand to broader audiences

FluoretiQwww.fluoretiq.com

Developing a rapid diagnostic platform for detection of bacteria at the PoC. Their platform is based on advances in glycan chemistry and quantum optics

Future Geneticswww.futuregenetics.co.uk

A non-profit focused on the discovery and development of disease biomarkers in areas of unmet clinical need

Genomics plcwww.genomicsplc.com

A genome analysis company building analytical platforms for optimising genome sequencing and integrating DNA data with diverse biological information to enable better discovery of new drug targets and to deliver precision health

GM Scientificwww.linkedin.com/company/gm-scientific/about/

Specialises in the distribution and marketing of innovative healthcare products

Hutano Diagnosticswww.linkedin.com/company/hutano-diagnostics/

A start-up developing a diagnostic and surveillance platform for diseases caused by emerging and dangerous pathogens which cause recurring epidemics in Africa

Inivata<https://www.inivata.com/>

A global clinical cancer genomics company. Its InVision® platform unlocks essential genomic information from a simple blood test to help realise personalised care for cancer patients

Intelligent OMICS<http://www.intellomx.com/>

Using an in-house data analysis algorithm to identify patterns in healthcare datasets to find new disease markers and drivers of disease pathways that will lead to new diagnostic tools and targeted therapies

Invizius<https://www.invizius.com/>

Developing a coating for kidney dialysis membranes that prevents activation of the immune system and its undesirable effects on the patient

Iota Scienceswww.iotasciences.com

Are pioneering the development of technologies and facilitate the rapid shaping of liquids on surfaces used to maintain and analyse cells, i.e. polystyrene and glass

Isansys Lifecarewww.isansys.com

Developing and commercialising wireless monitoring devices and systems for real time and predictive indications of patient status in the hospital and home setting

Manchester BIOGELwww.manchesterbiogel.com

Developing biocompatible and biodegradable graft materials that provide the ideal matrix for implanted cells to carry out tissue repair and regeneration

Medherantwww.medherant.co.uk

A clinical-stage company developing drug-in-adhesive patch products for pain and CNS diseases based on their TEPI® technology in combination with already approved drugs

Marker Diagnostics

A biotech startup developing microRNA biomarkers for use in molecular neuroscience

Momentum BioSciencewww.momentumbio.co.uk

Develops rapid tests for critically-important clinical specimens within the hospital microbiology laboratory

Newrotexwww.newrotex.com

Newrotex has developed a silk-based nerve conduit to treat peripheral nerve injury (PNI). The 'off-the-shelf' device allows immediate treatment for patients who have suffered injury through trauma or cancer surgery, without any of the associated risks of the current gold-standard treatment of autografts

NuNanowww.nunano.com

A UK-based company specialising in the design and manufacture of probes for atomic force microscopy and cantilever-based sensor devices

Onca XTwww.oncaxt.com

Developing a unique type of blood test for cancer which, used in conjunction with existing methods of screening and diagnosis, could improve their accuracy of diagnosis

Oncimmune<https://oncimmune.com/>

Oncimmune is developing early cancer detection technologies for more effective disease management

Orthoxwww.orthox.co.uk

Developing a range of novel orthopaedic products for the repair of knee cartilage formed from FibroFix™, a patented, biomaterial with a molecular structure, strength and resilience that emulates human knee cartilage

Oxford Cancer Biomarkerswww.oxfordbio.com

Developing a suite of drug-specific companion diagnostic tests using its predictive biomarker technologies CancerNav®

Oxford Endovascularwww.oxfordendovascular.com

A medical device company developing a next generation flow-diverter for the minimally invasive treatment of intracranial aneurysms which cause death or disability due to brain haemorrhage

Oxford Gene Technologywww.ogt.co.uk

Provides genetics research solutions to clinical and academic research institutions

Oxford Immunotecwww.oxfordimmunotec.com

A global, commercial-stage diagnostics company committed to improving patient care by providing advanced, innovative tests in the field of immunology

Oxford Nanopore Technologieswww.nanoporetech.com

Developing a new generation of nanopore-based electronic systems for analysis of single molecules, including DNA, RNA and proteins

Psyros Diagnosticswww.psyros.com

Developing an ultra-sensitive point-of-care diagnostic technology platform

Renovos Biologicswww.renovos.co.uk

Commercialising the research undertaken at the University of Southampton on skeletal stem cells, translational orthopaedic research and materials for tissue repair

Rosa Biotechwww.rosabio.tech

Developing new sensing devices that mimic the properties of the olfactory systems of mammals. The key components are self-assembling peptide barrels capable of binding a huge range of analytes and these are linked to a colorimetric measurement system

Safeguard Biosystems Holdingswww.sgbio.com

Commercialising molecular diagnostic technologies and tests for mass surveillance and selective screening for pathogens and other agents for agriculture, food safety, genetic screening and human health applications

Sense Biodetectionwww.sense-bio.com

Developing a range of point of care diagnostics

SeraScience Limited<https://www.abingdonhealth.com/medical-diagnostics/seralite/>

SeraScience operates as a part of Abingdon Health. They work in the diagnostic space and have a lead product 'Seralite' for detection of multiple myeloma

Sharp Life Science (EU)www.aqdrop.com

A medical device company that is developing the aQdrop lab-on-a-chip microfluidic technology platform (<https://www.aqdrop.com/>) lab-on-a-chip which offers advances in accuracy, quality and reliability in genomics, proteomics and other areas

Spintex Engineeringwww.spintex.co.uk

Spintex, a spin out from the University of Oxford, manufactures pure and tough silk fibres and materials for medical devices and regenerative medicine

The Electrospinning Companywww.electrospinning.co.uk

Design, develop and manufacture materials for use in regenerative devices and in 3D cell culture

Ultromicswww.ultromics.com

Developing an AI-driven software platform that provides increased diagnostic capabilities to echocardiography equipment to improve the diagnosis of coronary heart disease

VivoPlex Medicalwww.vivoplex.com

Developing an innovative monitoring device to measure dissolved oxygen (DO), pH and temperature in the uterus of women seeking medical help to improve their fertility

Yourgene Health www.yourgene-health.com

Molecular diagnostics company providing a range of gene testing and analytical services to a range of markets

Other Biotechnology

Azotic Technologies www.azotictechnologies.com

Their natural nitrogen fixing technology, which is based on a food grade bacteria, provides a sustainable solution to fertiliser overuse and nitrogen pollution

Crysalin www.crysalin.com

Developing a protein lattice nanotechnology to assist in formation of crystals of macromolecules for use in X-ray and EM structure determination studies

Folium Food Science www.foliumscience.com

Developing 'Guided Biotics' to alter the composition of complex microbiomes. Applications envisaged include removal of undesirable bacteria from animals and plants and from the environment and food

Glaia Limited www.glaia.co.uk

Aiming to enhance agricultural productivity and reduce pressure on natural resources by optimising the performance of plants

Green Biologics www.greenbiologics.com

A renewable chemicals company focused on developing and delivering new green alternatives for everyday products providing clients with more sustainable products compared to petroleum-based alternatives

Jellagen www.jellagen.co.uk

Offer high grade native collagen sourced from jellyfish. This is applicable for tissue engineering, regenerative medicines, stem cell research and a wide variety of cell culture application

MOA Technology www.moa-technology.com

Aim to discover the next generation of sustainable herbicide chemistries with new modes of action from both natural and synthetic sources

Myconeos www.myconeos.com

Production of fungal spores for use in the food industry

Worn Again Technologies www.wornagain.co.uk

Pioneering polymer recycling technology that can separate, decontaminate and extract polyester polymers, and cellulose from cotton, from non-reusable textiles and PET bottles and packaging and turn them back into new textile raw materials as part of a continual cycle

Zentraxa <https://zentraxa.com/>

Developing a range of new peptides products based on a detailed system of marine mussels adhesion protein and a novel production that enables their exploitation. Applications include in medicine, personal care product ingredients and nutraceuticals

CXO/Consultant

A4Pbio www.a4pbio.com

Delivers expertise in the selection, use, interpretation and bioanalysis of clinical biomarkers and pharmacokinetics across multiple therapeutic areas by engagement and management of CRO suppliers for pre-clinical and clinical studies

Abzena www.abzena.com

Offer a range of complementary services and technologies for the selection, development and manufacture of biopharmaceuticals products based on antibodies or other proteins

Aigenpulse www.aigenpulse.com

A data management and analytics platform for scientific data generated within the field of life sciences

Alan Boyd Consultants www.boydconsultants.com

Provide specialist consulting services for pharma and biotech companies to support their research activities and drug development

Alderley Analytical www.alderleyanalytical.com

Offer specialist bioanalytical services to support drug development programmes, from discovery through to late stage clinical development, focusing on small or large molecules, peptides and biomarkers

Antibody Analytics www.antibodyanalytics.com

Provide innovative solutions for the effector function characterisation of therapeutic antibodies with a specific focus on biosimilars

ApconiX www.apconix.com

An integrated toxicology and ion channel company at the forefront of nonclinical toxicology and safety science related to ion channels in particular

Apex Healthcare Consulting www.apex-consulting.co.uk

An analytical healthcare consultancy which provides strategic business evaluations and analysis the healthcare sector in Europe and the US

Apex Molecular www.apexmolecular.com

A synthetic chemistry company providing specialist services for the pharmaceutical, biotechnology and applied chemical sectors

Aptus Clinical www.aptusclinical.com

Provide a range of services including full clinical study design, oversight and delivery and individual consultancy projects

Aquila BioMedical www.aquila-bm.com

Aquila BioMedical is a preclinical contract research organisation, offering clients world-leading research expertise in immunology, immunology and multiplex histology

Arcinova www.arcinova.uk

A CDMO that provides a comprehensive range of services including process, research, development, scale-up and small scale manufacturing

Arctoris www.arctoris.com

Provides a range of automated/roboticised services to support drug discovery and development particularly within oncology

Athena Market Access Solutions www.athenamarketaccessolutions.co.uk

Specialise in providing pricing and reimbursement related solutions to organisations in the life sciences industry

Aurelia Bioscience www.aureliabio.com

Provide services in biological assay development, biological screening and laboratory equipment consultancy to SMEs, universities, medical charities, pharmaceutical companies and screening equipment manufacturers

BioAscent Discovery www.bioascent.com

Has extensive capabilities encompassing medicinal chemistry, computational chemistry, in vitro biosciences, DMPK, compound management

BioDivide www.biodivide.com

"Aim to transform the regenerative medicine field by addressing challenges in the complete workflow from stem cell harvest, manufacture, cryostorage to clinical administration"

Biomedha www.biomedha.com

A CRO offering a range of pre-clinical drug development services to clients in biotech, pharma and virtual companies as well as spin-outs and academic institutions

BioPharma Stability Testing (BSTL) www.biopharmastabilitytestinglaboratory.co.uk

Perform analytical and biological testing services and provides access to high throughput analytical and bio-analytical testing equipment

BioPharmaLogic www.biopharmalogic.com

Offer services to facilitate all aspects of nonclinical drug development

Biorelate www.biorelate.com

Provide biomedical research services based on their Galactix AI platform that unifies data processing, querying, deep learning and investigation

C4X Discovery www.c4xdiscovery.com

Exploits cutting edge technologies to design and create small-molecule candidates in a range of therapeutic areas

CatSci www.catsci.com

A process research and development CRO working in the drug discovery and development area

Celentyx www.celentyx.com

A CRO offering bespoke assay services in human immunology, including immuno-oncology, autoimmunity and inflammation, fibrosis and neuroinflammation

Cello Health Consulting www.cellohealthconsulting.com

Focuses on the Healthcare industry (RX / OTC & Animal Health) helping companies unlock the potential of organisations, people, assets and brands

Cellomatics Biosciences Ltd www.cellomaticsbio.com

Provides expert preclinical in vitro services within oncology/immunology, immunology/inflammation and respiratory therapeutic areas

CEM Analytical Services (CEMAS)www.cemas.co.uk

A contract analytical company specialised in generating registration data on behalf of the pharmaceutical, agrochemical and biocides industries

Centre for Process Innovation (CPI)www.uk-cpi.com

Helps companies to develop, prove, prototype and commercialise next generation products and processes

Charnwood Molecularwww.charnwood-molecular.com

Provide medicinal and synthetic chemistry services to the global pharmaceutical, biotechnology and chemical industries

CIMYM BioSciences<https://cargocollective.com/CIMYM/Home>

Provide consultancy services for development of drugs and diagnostics

Cobra Biologicswww.cobrabio.com

A CDMO providing biologics and pharmaceuticals for clinical and commercial supply

Concept Life Sciences<https://www.conceptlifesciences.com/>

Provide a wide range of services to assist drug development and have particular expertise and success in oncology, anti-infectives, CNS, respiratory, metabolic and cardiovascular.

Covance Laboratorieswww.covance.com

Provide nonclinical, clinical, and commercialisation services to pharmaceutical and biotechnology companies to help reduce the time and costs associated with drug development

CRA International<http://www.crai.co.uk/industry/life-sciences>

A global consultancy serving diverse sectors including the life sciences

Cripps Clinical Consultingwww.crippsclinical.com

Specialise in selection and oversight of European service providers to support client's clinical development programmes

Cytera CellWorkswww.cytera.bio

Developing technology for automation of cell culture

Data Magikwww.datamagik.co.uk

Offer a full clinical trial design and management service, including a complete range of statistical and data management support services

Diamond Pharma Serviceswww.diamondpharmaservices.com

Diamond Pharma Services is a technical services and consulting group, providing expert support and advice to pharmaceutical and biotechnology companies with expertise in the cell and gene therapy space. Their three core areas are regulatory affairs, pharmacovigilance and compliance

Diligent Business Consulting

Assist clients with various industry related projects, including outward and inward licensing, and supporting early/mid-stage companies wishing to become investor ready

Domainexwww.domainex.co.uk

Domainex offers a range of integrated approaches to medicinal chemistry, biochemistry and computational chemistry to assist rapid development of new therapeutics

Drug Discovery and Development Consultantswww.3dconsultants.org.uk

Drug discovery and development consultants provide support and advice across all aspects of drug discovery and development, in-licensing or out-licensing of assets or technologies, as well as preparation of business plans and identifying/presenting to potential investors

ERA Consulting UKwww.eraconsulting.com

A regulatory affairs and product development consulting groups serving the biopharmaceutical industry. Their services covers quality, nonclinical and clinical aspects, both from the regulatory and development strategy perspective

EUDRACwww.eudrac.com

A specialised regulatory affairs consultancy company providing support to drive products through development, registration, market launch and post-approval activities across all EU countries

Eurofins Pharma Discovery Services UKwww.eurofins.com

A contract research organisation that provides drug discovery services to pharma and biotech companies worldwide

Evotecwww.evotec.com

Evotec is a well established CRO in the drug discovery and development space with European and US presence

Excellerate Biosciencewww.excelleratebio.com

Provide molecular pharmacology services to drug discovery companies, specialising in kinetic assay design and ligand characterisation

Fidax Limited

Provide international technology and life sciences senior executive experience, with extensive PLC board level and Public Sector Service. In depth background in licensing, corporate financing, IPO's, M&A and managing strategic change with blue chip companies worldwide

Food and Drug Analytical Services (FDAS)www.fdas.org

A contract testing laboratory, providing independent, GMP analytical services. The company's MHRA-accredited laboratories offer a full range of analytical methodologies, ICH stability storage, development and validation expertise

GENEWIZ Europewww.genewiz.com

Specialises in DNA-based services, including DNA sequencing, gene synthesis, molecular biology, genomic, and GxP/CLIA regulatory-compliant services

Gentronixwww.gentronix.co.uk

A biotechnology service company offering early screening, mechanistic follow-up and regulatory genotoxicity assays for a range of industries including pharmaceuticals, chemicals, agrochemicals, personal care, consumer products, flavours, fragrances and taste enhancers

Gifford Biosciencewww.giffordbioscience.com

A preclinical CRO providing receptor occupancy studies, radioligand binding assays and autoradiography

HC Pharma Consultancywww.helencohen4.wixsite.com/hcpharma

Provides personal guidance and support to pharma and biotech for all partnering activities for pharma products; developing partnering strategies, leading out-license campaigns, in-license searches, due diligence, negotiation of contracts or management of alliances

Hematogenix Laboratory Serviceswww.pharma.hematogenix.com

A GCP compliant and CAP and CLIA certified laboratory offering clinical trial biomarker services including flow cytometry, FISH, IHC, mRNA ISH, PCR, sequencing, and many more

High Force Research<https://highforceresearch.com/>

Provide bespoke chemical design and synthesis services

HistologiXwww.histologix.co.uk

A privately owned GLP/GCP accredited contract research organisation that provides pathology services for the pharmaceutical and biotechnology industry. They provide human tissue based solutions in support of regulatory preclinical programmes, clinical trials in addition to biomarker projects

Horizon Discoverywww.horizondiscovery.com

Provide a range of services to support drug discovery including functional genomics and high throughput screening using sophisticated CRISPR generated lines, animal models and gene editing (using CRISPR technology)

Imagen Therapeuticswww.imagentherapeutics.com

Provide a complete high content screening service for large pharma and small biotech. The company offers a wide range of image-based assays including neuronal, angiogenic, cellular signalling, and other complex morphological assays.

InClinicawww.inclinica.com

A global clinical CRO that specialises in leading companies through clinical trials and applying their in-depth experience and expertise in clinical research and drug development

Invicrowww.invicro.com

An imaging science company that provides advanced data analysis services and software in the growing field of pre-clinical imaging research

Invivo Clinical T/A Bionomicswww.invivoclinical.co.uk

A healthcare company that offers the latest advancements in bioscience, diagnostics and therapeutics to healthcare practitioners and their patients

Jon Rees Associateswww.jonreesassociates.com

A specialist consultancy with a focus on the interface between investment and innovation.

Kaleidoscope Consultantswww.kaleidoscopeconsultants.com

Data privacy consultants

Kelyonwww.kelyon.com

An ICT company which specialises in the design and development of software medical devices, web and mobile applications based on open source technologies, for big pharmaceutical companies, medical-scientific associations, and healthcare facilities

Kinomicawww.kinomica.com

Kinomica is a proteomic-data science and diagnostics company specialising in cell signalling. They offer a suite of advanced proprietary bioinformatics and phosphoproteomics analytical methods that can provide direct activity measurements of multiple endogenous kinases and comprehensive cell signalling network coverage

Leaf Expression Systemswww.leafexpressionsystems.co.uk

A CDMO specialising in plant-based expression systems and the production of custom proteins

Lonza Biologicswww.lonza.com

Operates as a contract manufacturer of monoclonal antibodies and recombinant protein and engages in protein engineering, viral testing, toxicology studies, and clinical trials.

Ludgerwww.ludger.com

Specialises in analytical technology for medical applications of glycobiology and manufactures a comprehensive range of kits and reagents for ICH-compliant glycoprofiling of biopharmaceuticals throughout the drug development cycle

Manentiawww.manentia.co.uk

A full service CRO that delivers clinical development service for whole programmes or individual projects

Menarini Biotech UKwww.menarini-biotech.com

A CDMO that provides expertise in production of biosimilars, innovative monoclonal antibodies and other recombinant proteins

MicrobesNG<https://microbesng.com>

Provide a range of Illumina based genome sequencing services

Mologicwww.mologic.co.uk

A CRO working in the diagnostics space. It offers services in the research, development and manufacture of lateral flow based in vitro diagnostic devices

myClin Europewww.myclin.com

Offers a clinical oversight platform that allows users to share documents efficiently, improve engagement and stay audit-ready at all times

NDA Regulatory Science<https://www.ndareg.com/>

A leading regulatory and drug development consultancy with a dedicated team of over 150 consultants supported by an expert network and a specialist Advisory Board

NDY Consultingwww.ndy.com

Consulting engineers

Oxford Expression Technologieswww.oetltd.com

CRO with expertise in baculovirus protein expression

Paras Biopharmaceuticals Finland Oywww.parasbiopharma.com

A Finnish CDMO offering contract development and microbial biologics manufacturing, development and licensing of biosimilars and recombinant bioprocess enzymes

Patheon, part of ThermoFisherwww.patheon.com

Patheon, now part of ThermoFisher, provides drug development and manufacturing services to the ThermoFisher group and works in close association with Fisher Clinical Services

Peak Proteinswww.peakproteins.com

Provides protein supply and structure based drug discovery services to clients

Peppermill

Provide consultancy and advisory services to healthcare, pharmaceuticals and biotechnology clients

Pharmaronwww.pharmaron.com

An R&D service provider supporting a wide range of services, from early discovery to clinical development

Pharmidex Pharmaceutical Serviceswww.pharmidex.com

Provide translational solutions using its expertise in CNS/oncology/respiratory, DMPK, drug discovery and ADMET/pharmacokinetics

Phastarwww.phastar.com

A global CRO offering statistical consulting, clinical trial reporting, data management and data science services by providing expert consultants and managing and delivering in-house projects, FSP-style arrangements and preferred partnerships

Phosphonicswww.phosphonics.com

Developing custom and off-the-shelf technologies for removal or recovery of traces of a wide range of metals in product, process or waste stream. Applications in pharmaceutical preparation and chemical production

Physiomicswww.physiomics-plc.com

Provide outsourced systems and computational biology services to pharmaceutical companies including Virtual Tumour, Virtual Tumour Preclinical and services to predict cardiac toxicity

Precision for Medicine, Oncology and Rare Diseasewww.precisionmedicinegrp.com/pfmord/

An oncology specialty CRO that provides clinical research services and application of metrics-driven project management to optimise oncology drug development

OBN Membership

JOIN OVER 400 MEMBER COMPANIES BENEFITING FROM OUR SERVICES

Membership to OBN gives you access to partnering, purchasing, training, advice and advocacy. Learn from your peers and grow your business.

Membership criteria**OBN Membership is open to:**

- UK and international companies
- Investors
- Academic and research institutions
- Independent consultants
- Contract research organisations
- Public bodies
- Government departments
- Associated service providers in the life sciences sector

Membership Benefits Networking -**Attend OBN events**

- Connect with life sciences companies, their corporate partners and investors
- Expand your company's presentation opportunities
- BioTuesdays – evening meetings with a sector-relevant theme or a Company Showcase format
- BioThirstdays – evening social events to meet informally
- Senior Executive Club – Breakfast, Lunches and Dinners: invitation events, high level focus materials

Plus many more..**Advocacy**

- Promoting Members' interests at local, regional and international level
- Attend exclusive events to connect with influencers and key decision makers

Partnering

- £300 discounted registration at BioTrinity – OBN's flagship event and Europe's leading Biopartnering and Investment Conference. Engage with 1,000+ delegates from 30 countries
- Access conference discounts worth over £1,000 per person
- Request introductions to key personnel

Purchasing

- Access average savings of 50% off list price through the OBN Purchasing Consortium
- Buy alongside 110+ eligible Member companies
- Process managed by an in-house Procurement Manager
- Access to a new online Purchasing Platform

Training

- Use BioLearn® to access high level training tailored to the needs and requirements of life sciences staff at discounted prices

Advice

- Find facilities, equipment, expertise within the OBN Membership and in other geographical areas
- Make contacts through our partner organisations
- Canvass opinion and consult on key issues for your company
- Commission OBN Intelligence to address key issues for your organisation



To find out more about OBN Membership benefits visit: obn.org.uk or contact Nicola Westgate, Membership Manager, nicola.westgate@obn.org.uk or call +44 (0)1235 420879

Prisma Limitedwww.prisma.com

Prisma is a biotech software development company with experience in research informatics, biology, software and mathematics and offering consulting services to solve one-off complex problems up to crafting efficient, everyday, elegant solutions

ProlImmunewww.proimmune.com

A life science company providing solutions for preclinical and clinical immunology research

Q3 Analyticalwww.bioanalysisforresearch.com

Provide non-regulated bioanalytical support for small pharmaceutical companies carrying out drug discovery and research and also analyse in-vitro samples generated by the client's own in-house biological assays

Quotient Sciences<https://www.quotientciences.com/>

Provide CRO and CDMO services including formulation development, clinical pharmacology trials, and clinical and commercial manufacturing services to the pharmaceutical and biotech industry

Reach Separationswww.reachseparations.com/

Specialise in chromatography techniques for the analysis and purification of small molecules, offering screening, method development and purification for chiral and achiral molecules

RenaSciwww.renasci.co.uk

Provide highly specialised consultancy and preclinical experimental services to the global pharmaceutical industry in the areas of abuse and dependence, CNS, obesity, diabetes, NASH and kidney disease

Rockpool Bioscienceswww.rockpoolbio.com

Provides genomics and AI consultancy services

RSSLwww.rssl.com

Provide analytical, investigational, consultancy and training services to clients in the global biopharmaceutical, pharmaceutical and healthcare industries

SAL Scientific Limitedwww.salscientific.com

Cell biology specialists providing contract research services and animal-component-free cell culture media supplements to a global client base

S-cubedwww.s-cubed.co.uk

S-cubed provides consultancy and support services to pharmaceutical and healthcare clients across a comprehensive range of regulatory, quality assurance and biometrics activities

Seda Pharmaceutical Development Serviceswww.sedapds.com

Seda Pharmaceutical Development Services provide pharmaceutical development and clinical pharmacology services and consultancy to the pharma and biotechnology industry

Shanghai Medicilon Incwww.medicilon.com.cn

Provide a wide range of contract services for development of new drugs

SPG Innovationwww.SPGINnovation.co.uk

Commercialisation of Intellectual Property in food, life sciences and agritech providing wide range of services in this area

Syneos Healthwww.syneoshealth.com

Use their Biopharmaceutical Acceleration Model to assist clients with clinical and commercial development

SyneractHCRwww.syneracthcr.com

A full-service CRO that supports pharmaceutical, biotechnology and medical device companies in all phases of clinical development, across multiple therapeutic areas

Tetrad Discoverywww.t4bio.com

A CRO providing bespoke bio-analysis solutions tailored and integrated to the sponsors requirements, using state-of-the-art technologies

Theradex (Europe)www.theradex.com

Offer regulatory and clinical trial management, clinical trials monitoring services, and QA/auditing

TranScrip Partnerswww.transcrip-partners.com

Provide support for the development and lifecycle management of biopharmaceutical products in the field of oncology, respiratory, internal medicine, and CNS

Upperton Pharma Solutionswww.upperton.com

A research and development company that specialises in the formulation and spray drying of pharmaceutical and biotechnology products

Vivonics Preclinicalwww.vivonics-preclinical.com

A CRO providing preclinical services and consultancy to the biotech and pharmaceutical industry

Williamson Biotech Solutionswww.williamsonbiotechsolutions.com

Offer facilitating services to biotech, medtech, pharma and academic institutions delivering communication, marketing and business development services

Wuxi AppTecwww.wuxiapptec.com

A pharmaceutical, biotechnology, and medical device R&D service provider with operations in China and the United States

XenoGesiswww.xenogenesis.com

Specialises in preclinical drug metabolism and pharmacokinetics, quantitative bioanalysis, and data interpretation services

Academic Institutions**Oxford Brookes University**www.brookes.ac.uk

One of the UK's 'modern' universities and provides teaching and innovation as well as strong links with business and industry

Oxford Institute of Biomedical Engineering.www.ibme.ox.ac.uk

Offer a multidisciplinary environment where engineers and clinicians work together on addressing unmet needs in the prevention, early diagnosis and treatment of major diseases and conditions.

Oxford University Innovation (OUI)www.innovation.ox.ac.uk

Is a wholly-owned subsidiary of the University of Oxford and focuses on managing the University's technology transfer and consulting activities.

Queen Mary Innovationwww.qminnovation.co.uk

Queen Mary Innovation Ltd (QMI) is Queen Mary University of London's (QMUL) wholly-owned technology transfer company and responsible for the commercialisation and management of the University's intellectual property and portfolio of spinout companies

Queen's University Belfast Research and Enterprise Directoratewww.qub.ac.uk/Research/Research-contacts/

Help to deliver research and enterprise activities through the development of research strategy and policy.

Royal Veterinary College Businesswww.rvc.ac.uk/business

The Royal Veterinary College's interface with business and industry

University of Birmingham Enterprisewww.birmingham.ac.uk/enterprise

Supports academics who want to innovate, take their ideas to market, work with businesses and social enterprises, or enrich their professional lives by doing academic consultancy projects.

Warwick Ventureswww.warwickventures.com

Is the technology transfer business unit of the University of Warwick and supports them throughout the process of generating impact and a commercial return from their research.

R&D Support**2BScientific Ltd**<https://www.2bscientific.com/>

Europe's fastest growing distributor of life science reagents

4T2 Sensorswww.4t2sensors.com

Developing an in-line flow sensor system that can detect concentrations, contaminations and mixtures of fluids

Absolute Antibodywww.absoluteantibody.com

Develop engineered antibodies for the research and diagnostics markets

ACE Cells Labwww.ace-cells.co.uk

A biomolecular lab specialised in providing bioactive peptides and proteins from a range of different cells and tissues

Air Liquide UKwww.uk.airliquide.com

A producer and supplier of industrial and medical gases and related services

Air Productswww.airproducts.co.uk

Provides atmospheric and process gases and related equipment to manufacturing markets and is also a supplier of liquefied natural gas process technology and equipment

AMS Biotechnology (Europe)www.amsbio.com

Specialise in genomics, proteomics, cell culture and stem cell sciences, providing products and custom services for life sciences research

ATG Scientificwww.atgscientific.co.uk

A supplier of laboratory products and equipment solutions to support life sciences research

Aver Decommissioning & Environmental www.averdecom.com

A specialist decommissioning and environmental consultancy working across a wide range of industrial sectors in the UK and overseas

Avidity IP <https://avidity-ip.com/>

Commercially focused European & UK patent attorneys specialising in Life Sciences and Medical Technologies with a growing Engineering initiative.

Avitus Group Companies www.avitusgroup.com

Provide a range of services for growing businesses including accounting, payroll, HR, insurance, recruiting amongst many others

Biogelx www.biogelx.com

A biomaterials company which designs and supplies peptide hydrogels tuned to the requirements of cells to be used for 3D cell culture and bioprinting

Bioline Reagents www.bioline.com

Develop, manufacture and market molecular biology reagents

Bio-Rad AbD Serotec www.bio-rad-antibodies.com

Provide a wide range of reagents, particularly antibodies, for life sciences research

BMG Labtech www.bmglabtech.com

A leading manufacturer of high-quality, innovative microplate reader instrumentation

Bruntwood Scitech <https://bruntwood.co.uk/about-bruntwood/scitech/>

The UK's leading property provider dedicated to driving the growth of the science and technology sector

Carbosynth www.carbosynth.com

Offers a comprehensive product range in the fields of carbohydrates and nucleosides for the international life science R&D communities

Enplas <https://www.enplasilifetech.com/>

A global corporation with diverse interests. Enplas Life Tech is the leading single-source manufacturer of high-quality custom plastics parts for global OEMs in the medical, biotech, pharmaceutical, and life science industries

Fisher Scientific UK www.fishersci.co.uk

Manufactures and supplies laboratory chemicals and laboratory equipment.

Intech Calibration www.intechcalibration.co.uk

Laboratory calibration services and Laboratory furniture / fit-out

New England Biolabs (UK) Ltd <https://www.neb.uk.com/>

Provide a wide range of lab reagents and kits to support R&D

NgaChi

A biotech startup hosted in The Biohub Birmingham and is currently working on the development of a new laboratory consumable

Nikalyte Ltd www.nikalyte.com

Nikalyte Ltd is a leading supplier of various nanoparticles coatings for R&D and commercialization in a wide variety of application areas including cell binding, cell separation, drug delivery, catalysis, metamaterials, nano-photonics, electrochemistry, and batteries

Nonacus www.nonacus.com

Focus on delivering technologies to the genomic healthcare sector through the use of cell free circulating DNA as a non-invasive diagnostic tool

Oxford Nanoimaging (ONI) www.oni.bio

Bring fluorescence imaging with the greatest level of detail to a new community of researchers, by removing the complications associated with instrumentation, analysis and cost

PCR BioSystems <https://pcrbio.com/>

Expert in innovative PCR products to support R&D

PeproTech EC www.peprotech.co.uk

Focus on the development and manufacturing of cytokine products for the life-science and cell therapy markets.

RS Components www.uk.rs-online.com/web/

Provides a vast range products, in particular electronic, electrical and industrial components

Thermo Fisher www.corporate.thermofisher.com

Provide a vast range of consumables, reagents and equipment to the life sciences industry

Tissue Solutions www.tissue-solutions.com

Is an ISO 9001:2015 accredited provider of high quality human biomaterials for pre-clinical and discovery biomarker research

Tracer Measurement Systems www.birminghamresearchpark.co.uk/tenants/tracer-measurement-systems-ltd

Provide applications R&D, sales & marketing of mobile chemical ionisation mass spectrometers

Charity Organisations

Kirkhouse Trust www.kirkhoustrust.org

Is a small charity which aspires to improve the food security and livelihood of the rural poor in sub-Saharan Africa and India

Oxford Trust www.theoxfordtrust.co.uk

Encourage and facilitates the study, application and communication of science, technology, engineering and mathematics

Investors & Advisers

Akesios Associates www.akesiosassociates.com

Provides financial strategy, representation and commercial development advice to life science companies.

Alternative Research

Investment advisers

Cambridge Innovation Capital www.cambridgeinnovationcapital.com

An investment fund that invests in high-growth technology companies in diverse sectors

Downing www.downing.co.uk

Offer management of investment products for investors such as venture capital trusts, enterprise investment schemes, inheritance tax mitigation funds, business premises renovation allowance schemes, and an open ended investment company

Longwall Venture Partners www.longwallventures.com

An Oxford based, venture capital fund management company that specialises in managing early stage investments in science, engineering and technology start-ups

Midven www.midven.co.uk

Is a private equity and venture capital firm specialising in start-up, early stage, growth, management buy-outs, and management buy-ins investments in small and medium sized enterprises

Norgine Ventures Management www.norgineventures.com

Provide debt and debt-like financing to companies in the fields of healthcare and life sciences, in Europe and the US

Results Healthcare www.resultshealthcare.com

Provide corporate finance expertise and strategic business advice to the healthcare sector

Seroba Life Sciences www.seroba-lifesciences.com

Seroba Life Sciences is a European fund manager that invests in the therapeutics and medical devices arena

Silicon Valley Bank www.svb.com

Provide a full range of financial services to companies of all sizes in innovation centers around the world

SR One www.srone.com

Specialise in investing in seed, start up, early and mid venture; and emerging growth companies

SV Health Managers www.svlsa.com

Is a healthcare and life sciences venture capital and growth equity firm managing over \$2 billion in capital in seven private healthcare funds in the US and Europe

Associated Industry

Activ Business Solutions www.activ-business.co.uk

Specialise in supplying organisations with a single source solution for all business products, for example, purchasing office furniture, redeveloping a company website, or reviewing office stationery

AggioSergeant www.aggiosergeant.com

Specialise in life sciences executive search and company culture change.

Alderley Park www.alderleypark.co.uk

Offer bioscience facilities for R&D focussed life science companies at every stage of their life-cycle, from start-up to global corporate.

Ardington Archives www.ardingtonarchives.co.uk

Provide a range of services in the field of document archiving

Barrington James Board & Executive Partners www.barringtonjames.com

Is a global staffing and resourcing organisation that specialises in placing niche consultants at all levels in the biotech and pharmaceutical industry

BDO www.bdo.co.uk

Global accounting and financial consultancy

BioCity Group www.biocity.co.uk

A bioscience incubator, providing the conditions that sustain more than 80 fast-growing businesses. incubator, providing the conditions that sustain more than 80 fast-growing businesses. It has centres in Nottingham, Alderley and Glasgow

BioHub Birmingham www.thebiohub.co.uk

A fully serviced biomedical research laboratory providing entrepreneurs and innovative start-ups with access to affordable laboratory facilities and equipment

Biotech Personnel www.biopers.co.uk

An HR consultancy business which specialises in start-up assistance, recruitment, reward management, policy and procedures and culture change programmes

Biotechgate www.biotechgate.com

Provide a business development database for the life sciences industry

British Columbia Trade and Investment <https://www.britishcolumbia.ca/global/trade-and-investment-representatives/>

Trade and Invest B.C. works with international enterprises to help them build strong links to the resources, skills and businesses that make British Columbia an attractive place to work and invest

Bulb Laboratories www.bulblaboratories.com

Build and furnish commercial interiors from corporate offices to high-tech laboratories

Catalyst Advisors Europe www.catalystadvisorslp.com

A recruiting firm specialising in finding board members, CEOs and senior functional, technical and commercial leaders for biopharmaceutical and other life sciences enterprises at all points of growth

Citigate Dewe Rogerson www.citigatedewerogerson.com

An international public relations firm offering the full range of communications services to companies, both domestically and internationally

Cleveland Scott York <https://www.csy-ip.com/>

A global IP firm

Coulter Partners www.coulterpartners.com

An executive search and management consulting firm assisting healthcare, pharmaceutical, biotechnology, and financial services sectors

Creative Places www.creativeplaces.com

Specialise in creating and shaping business environments that enhance innovation and enterprise, such as Science Parks, Biomedical Campuses, urban areas or Business Innovation Centres

Dehns www.dehns.com

A UK firm of Patent and Trade Mark Attorneys advising on all aspects of patenting innovative technology, registering words, logos and other marks and registering original designs

Destination Cloud www.destinationcloud.co.uk

A next generation Cloud Managed Service Provider, active in the UK and Europe, offering specialist cloud business transformation solutions to businesses

DiagnOx www.diagnox.co.uk

An incubator facility based at the Cherwell Innovation Centre in North Oxfordshire. Owned by Oxford Innovation

Discovery Park Limited www.discovery-park.co.uk

A science park based on the old Pfizer site at Sandwich and home to a growing number of life sciences companies

Dzaleta Consulting <https://dzaletaconsulting.com/>

Provides executive and non-executive search services

EFR Travel www.efrtravel.co.uk

Specialise in corporate travel as well as high end leisure and golfing holidays, private jet travel and a concierge division providing tickets for sold out events. EFR is a provider to the OBN Purchasing Consortium

Elcom Systems www.elcom.com

The world's first cloud-based procurement technology company. They provide solutions for e-invoicing, e-procurement, and e-funding to optimise the clients' Supply Chain processes and are the providers of the OBN Purchasing Platform

Elsevier www.elsevier.com

Provide information and analytics that help institutions and professionals progress science, advance healthcare and improve performance

Etheo Limited www.ethiolimited.com

Provide leadership training courses specifically tailored to the pharma and biotech sectors

Ethical Medicines Industry Group (EMIG) www.emig.org.uk

A multi-stakeholder network and trade industry association that represents the interests of the full span of life sciences companies in the UK

Fieldfisher www.fieldfisher.com

A multinational law firm which has practices in sectors including Real Estate, Energy, Financial Services, Government & Public Services, Hotels & Leisure, Life Sciences, Media, Telecoms and Technology.

Fourtold Ltd www.fourtold.eu

Experts in corporate, reputation and political communications

FTI Consulting www.fticonsulting-emea.com

Provide legal tax advice to UK based life sciences companies

Gallagher www.ajginternational.com

"Is active in insurance brokerage and risk management providing insurance solutions for a wide range of different businesses including the life sciences"

george james www.georgejamesltd.co.uk

Provide European recruitment and global strategic consulting and training services covering the biotechnology, pharmaceuticals, medical devices, diagnostics, instrumentation, scientific software, fine chemicals and chemical technology markets

Greaves Brewster www.greavesbrewster.co.uk

Handles the preparation, filing, prosecution and maintenance of patent, trade mark and design applications

Harwell Campus <https://www.harwellcampus.com/>

Is a science, innovation, technology and business campus and hosts an array of over £1 billion of research infrastructure

Hayes Parson Insurance Brokers www.hayesparsons.co.uk

Independent insurance brokers for the South West of England

Horton International UK www.hortoninternational.com

An executive search firm specialising in the recruitment of senior talent across numerous disciplines

Instinctif Partners www.instinctif.com/uk

Instinctif Partners provides communications consultancy services for science based sectors including corporate, healthcare, and marketing communications, as well as financial communications

Interea International www.interea.co.uk

A provider of middle to senior level interim management to UK and international life science and related companies (biotech, pharma, medical device, diagnostic, regenerative medicine etc.)

Inventya Ltd www.inventya.com

Inventya provide bespoke innovation support for SMEs, Universities, and Academic groups including bid writing and grant funding, R&D tax credit and Patent Box advice, finance for growth and collaborative R&D partnerships

Invest Newcastle www.investnewcastle.com

Invest Newcastle provide a range of bespoke, client led support services for potential investors, occupiers and existing businesses making it easy to realise ambitions for growth in Newcastle. The company provides a range of services to potential and existing investors.

IP Asset Partnership, The www.ipasset.com/

A specialist practice of patent attorneys that provide specific advice or assistance on all IP related matters

JA Kemp www.jakemp.com

Patent and trade mark attorneys

James Cowper Kreston www.jamescowper.co.uk

A firm of accountants and business advisors based in Henley, London, Newbury, Oxford, Reading and Southampton

KISS Communications www.kisscom.co.uk

Is a strategy-led agency that integrates advertising, branding, digital and public relations services, and works with companies in industries such as healthcare, science, technology, research and development

Koi Consulting www.koiconsultants.com

IT technology strategy consulting

Lonestar Strategies www.lonestarstrategies.co.uk

Provide a range of services to help organisations build sustainable competitive advantage and performance improvement through effective individuals and teams

Mary Ann Liebert Publishers <https://www.liebertpub.com/>

A leading independent publisher known worldwide for its peer-reviewed journals, books, and trade publications

MediCity Nottinghamwww.biocity.co.uk/locations/medicity-nottingham/

Provide a stimulating and supportive business development environment for innovators in consumer healthcare, medical technology, diagnostics and beauty products

MEPC Milton Parkwww.miltonpark.co.uk

A premium business and science park located near Abingdon. Part of the MEPC group

Middle East Medical Portalwww.middleeastmedicalportal.com

The premier medical portal between the West and the Middle East

Mills & Reevewww.mills-reeve.com

A commercial law firm offering corporate, commercial, property, litigation and private client services to a mix of regional, national and international businesses

North 51www.north-51.com

Engages in building, managing, and motivating sales teams including contract sales teams, nurse adviser teams, NHS liaison teams and specialist hospital teams

Ogders Berndtsonwww.odgersberndtson.com/en-nl

Specialises in recruiting and assessing senior executives and board members in the private, public and not-for-profit sectors internationally

OEG Laboratorieswww.oeglabs.co.uk

OEG Labs offers a full project-managed lab fit-out solution, from initial design through to custom manufacture and installation to customers in the UK

Osborne Clarkewww.osborneclarke.com

Provide legal services to meet clients' advisory, litigation and transactional needs in an international business environment that is reshaping to meet new digital, economic, environmental and political challenges

Oxford Bioescalatorwww.bioescalator.ox.ac.uk

Provide flexible lab space near the centre of Oxford to early stage biomedical science companies

Oxford Innovation Limited<https://oxin-centres.co.uk/>

The UK's leading innovation and incubation centre operator. Also providing feasibility and consultancy services and design and financial modelling

Oxford Science Parkwww.oxfordsp.com

Is designed for science, technology and business occupiers, maintains links with the University of Oxford and currently contains just over 70 companies

Oxford Seating Cowww.oxfordseating.co.uk

Designs and manufactures seating and related furniture for companies in many different industries

Oxford Technology Parkwww.oxfordtechnologypark.com

New science and technology park in Oxford

Penningtons Manches Cooperwww.penningtonslaw.com

Is a law firm providing legal services to ultra high net worth individuals and growing mid-market companies.

PharmaGuidewww.pharmaguide.co.uk

Offer drug discovery courses to a range of clients from professionals with no scientific background, up to PhD level scientists

Phoenix IFDwww.linkedin.com/in/james-robson-943ab41?originalSubdomain=uk

A life sciences and healthcare consulting business that focuses on innovative start ups in the pharmaceutical, healthcare and medtech sectors

PIA Life Science Insurance Brokerswww.piacommercial.com

Provide a range of specialist insurance products for individuals and businesses, including those in the life sciences sectors

PiRwww.pir-intl.com

A specialist recruitment company serving the international life sciences industry through executive search, interim management and talent management/mapping

Premier Choice Group<https://pch.uk.com/>

Provides health insurance services to individuals and corporate clients

Principlelabs/Office Laboratories<https://principlelabs.co.uk/>

Expert laboratory design and build

ProcEuropewww.proceurope.com/

Providing the power of a purchasing consortium to the life sciences sector in Europe through providing negotiable rates and specially selected suppliers

Release Life Sciences and Diagnosticswww.releaselifesciences.com

Help life science and diagnostics companies by providing commercial and marketing management services, interim management, training and development and career development and coaching

Richardsons Chartered Accountantswww.richardsons-group.co.uk

Provide accounting, audit and taxation advice (compliance and planning) to enterprises and individuals, along with payroll and financial services

Ridgefield Consultingwww.ridgefieldconsulting.co.uk

An independent firm of Chartered Accountants provides accounting, tax advice and planning to businesses and individuals

Scius Communicationswww.sciuscommunications.com

Scius Communications is focused on providing strategic communications to life science companies at all stages of development

SJB Technical Recruitmentwww.sjbtechnical.co.uk

Specialises in recruiting engineers and scientists to start-ups and SMEs with particular focus on medical engineering, engineering design consultancies, entrepreneurial firms and new technology

SRGwww.srg.co.uk

Is UK supplier of scientific, clinical and engineering recruitment solutions to the pharmaceutical, biotechnology, medical devices, FMCG, renewable energy, chemical and food processing industries

Starleafwww.starleaf.com

Video conferencing

Sue Rees Associateswww.suerees.co.uk

An accountancy executive search specialist supporting board level executives within the biotech, pharma, life sciences, start up and spin out companies

SynbiCITEwww.synbicite.com

The UK's national centre for the commercialisation of synthetic biology, providing a bridge between academia and industry to increase the development of new technologies in synthetic biology

Taylor Wessing<https://www.taylorwessing.com/en>

A global law firm providing services across many sectors including the life sciences

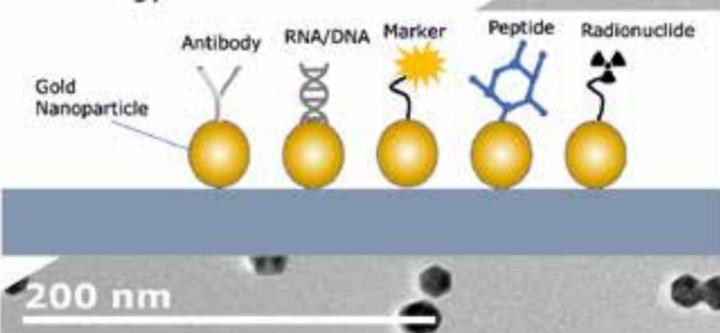
TBAT Innovationwww.tbat.co.uk

An independent consultancy that provides services and advice on grant funding, R&D taxation, and project management



Gold nanoparticles are the ideal building block for many bio applications including lateral flow sensors, bio imaging and SERs due to their combination of high active surface area and unique physical and optical properties. Nikalyte are experts in the deposition of ultra-pure and ligand free nanoparticles in vacuum.

If you are researching any of these applications contact us at sales@nikalyte.com to find out more about our novel technology.



ligand free
Bio compatible
Monodisperse
Size controlled
1-20nm

Unit DX

www.unitdx.com

A Bristol-based scientific innovation centre, catering for start-ups, SMEs and industrial team providing lab space, equipment, analytical services, expert support and facilitates cooperation between companies

Utility Team

www.utilityteam.co.uk

One of the UK's leading utilities and energy consultants, providing a wide range of value added utility that saves time and money

VA Beach Bio

www.vabeachbio.com

A business organisation that aims to market the Virginia Beach area as a prime location for life sciences companies moving to the US

Venner Shipley

www.vennershipley.co.uk

Is a firm of European patent and trade mark attorneys, representing a broad range of clients including major domestic and international corporations, SMEs, universities and individual inventors

VirdisGroup

www.virdisgroup.com

Is an executive search firm specialising in the lifescience and healthcare sectors

Wallder Limited

www.wallder.com

A UK-based executive search, interim management, and resourcing company that builds boards and senior management teams in the life sciences sector

Governmental organisation

AMR Centre UK

www.amrcentre.com

AMR Centre is a key part of the UK's response to the global threat from antimicrobial resistance to accelerate the development of new antimicrobial drugs and diagnostics

Embassy of Belgium

www.diplomatie.be

The London embassy of the Belgian Government and is active in the area of life sciences and collaboration between the UK and Belgium

Embassy of Switzerland, London - Office of Science, Technology and Higher Education

www.eda.admin.ch

The Office serves as an interface between the science and technology communities in Switzerland and the UK by providing information and facilitating contacts. The office works with government, universities and business to organise bilateral networking, matchmaking events and joint projects

HR Dept

www.hrdept.co.uk/newbury

Provide HR services to support companies with employment contracts, managing disciplinarys or other employment issues

Innovate UK

www.innovateuk.org

Work with people, companies and partner organisations to find and drive the science and technology innovations that will grow the UK economy and provides invaluable support to the life sciences through its grants programmes

Medicines Discovery Catapult

www.md.catapult.org.uk

Is a national facility for collaborative R&D projects and developing new approaches to the discovery and proof of utility of medicines, diagnostics and biomarkers

Netherlands Foreign Investment Agency

www.investinholland.com

The inward investment agency for The Netherlands

Public Health England

www.gov.uk/government/organisations/public-health-england

Their mission is to protect and improve the nation's health and to address inequalities through working with national and local government, the NHS, industry and the voluntary and community sector

West Midlands Growth Company

www.wmgrowth.com

A regional investment promotion and economic development agency, unlocking potential for the West Midlands and the UK with the primary purpose is to attract investment, jobs, visitors and business to the West Midlands

Other

Aliksir

www.aliksir.co.uk

Develop sensor systems to drive improvements in water quality testing

Nexeon

www.nexeon.co.uk

Nexeon® is a battery materials development and licensing company, developing silicon anodes for the next generation of lithium-ion battery



A Platform for Seed and Early Stage Life Sciences Investment

OBN Ventures® (OBNV) is a sophisticated FCA-approved on-line investment platform connecting investors and early-stage life sciences companies.

OBNV is not a traditional crowd-funding platform. All the investors are serious, professional investors who are credible, experienced, and actively looking for opportunities in the space.

The platform is totally complementary to OBN's major Conferences (BioTrinity® and BioSeed®) but offers the advantage of online access

throughout the year. Investment opportunities can also be shared with allied platforms to maximise the exposure to investors.

OBNV is open to all UK domiciled life sciences companies. OBN Members will benefit from assistance in drafting and posting their offers, and priority listing.

OBNV is a wholly owned subsidiary of OBN (UK) Ltd, the UK's leading life sciences membership organisation.

Advantages of using OBNV

For Companies

- Create a comprehensive profile of your investment proposition
- Gain exposure to a diverse range of professional investors
- Accept pledges and transact through the platform
- Track and manage investor interactions
- Control who views your documents with tiered information access
- Interact with investors using in-built Q&A facilities
- Access a broad range of investors by sharing your deal across allied platforms

For Investors

- Sign-up and self-certify online in minutes
- View detailed investment opportunities anonymously
- Access the platform 24/7
- Engage with management teams using Q&A facilities
- Pledge and transact online
- Monitor company progress with deal tracking and automatic updates
- Receive shareholder updates through the system

Capital at Risk: As with any investment there are risks which include illiquidity; lack of dividends; loss of investment; and dilution. You should invest only as part of a diversified portfolio. Please read the FULL risk warning.

Visit [OBN Ventures](#) for more details.

NEXT ISSUE

CONNECT issue 4 will be available
Spring 2021

Please contact Rebecca Wilkes,
Communications and
Marketing Coordinator,
rebecca.wilkes@obn.org.uk,
if you would like :

- to contribute to the
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We look forward to
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