



LBIC growth continues

LBIC is growing in every sense, with the new Apex and Tribeca developments coming on apace and with new additions to the team and client community.

The Apex Building on St Pancras Way, which will house LBIC's expansion space, now has all seven floors in place and work has begun on Phase 2 of the remaining Tribeca site. (The sheeting in the image above shows the full extent of the canal-side Tribeca development.) LBIC's Director of Operations, Janette Richardson, has a key role in ensuring that

the fit-out programme delivers best-in-class grow-on space to complement LBIC's existing offering and meet the future needs of clients as they expand their footprint in London.

Bringing her knowledge and expertise to LBIC at this time of exciting growth is our new Head of Business Development, Amanda Keightley-Pugh. Amanda has a strong network within the life science sector and has wide-ranging experience of working with – and on – science parks and incubators. She will lead LBIC's client

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WELCOME

A very warm welcome to the Summer 2023 issue of LBIC News. We've been saying a lot of welcomes here at LBIC, with new colleagues and a record number of new clients joining us recently. It's exciting to see the new directions that the science industry is moving in, including working towards more sustainable fabrics, or using AI in medical writing (page 2).

It's fantastic to see clients receiving funding and forming partnerships, and we continue to offer additional support for this through our Business Support Network – on page 7 we introduce our new provider Bold Innovates, which helps companies get investment-ready. My own new role as Head of Business Services will help ensure we are meeting clients' needs to support growth and achieve success.

Lucy Garnsworthy, Editor

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Nanloom: spinning success with graphene fibres

Nanloom is making ultra high-performing, biodegradable and recyclable fibres and fabrics from graphene, and kicked off the year with a bang in being recognised as one of London's leading fashion tech innovators by Forbes magazine.

The company has been spinning fibre at LBIC as part of its scale-up, funded by an Innovate UK Smart Grant, the UK's most competitive grant that typically has a success rate as low as 2% for applications. Nanloom are working in collaboration with leading universities and industry partners. The spun fibres are extremely strong, elastic and soft, ensuring a range of applications in which they will facilitate the move away from materials that shed microplastics. The Nanloom team has also recently graduated from the nine-month competitive Creative Destruction Lab programme in North America for massively scalable companies, opening investor and collaborative networks globally.

<https://www.nanloom.co.uk/>



Nanloom's biodegradable and recyclable fibres spun from graphene

Spray-on fabrics from seaweed

Fabrican has created a sprayable fabric from naturally occurring waste seaweed that might otherwise go to landfill.

Kelp (the largest subgroup of seaweed) grows in forests of long ribbons along coastlines, creating dense underwater environments. These colossal seaweeds are known for growing at phenomenal rates, with one species growing by as much as 60cm per day.

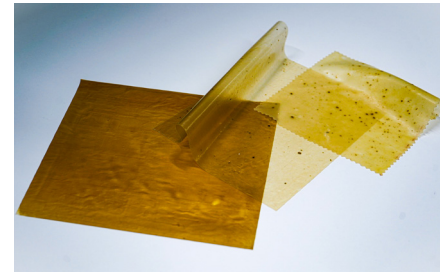
Kelp absorbs huge volumes of carbon, soaking up as much as 600 million tonnes of carbon every year worldwide, which is more than twice the UK's annual CO₂ emissions. A kelp forest can absorb as much as twenty times more carbon dioxide from the atmosphere than the same area of forest on land.

Fabrican is sourcing waste kelp as a raw material recovered from beach-casts and accretions of dead material in tidal wash. Potential applications include sprayable coatings, fabrics, and biodegradable plastics. Fabrican's seaweed-content fabrics contain 40-50% seaweed, yielding high-strength material. Research is ongoing to incorporate even higher concentrations of seaweed.

Fabrican's spray-on fabric technology achieves an even dispersion of the kelp to create matte or shiny fabrics and coatings, imparting properties of insulation, water resistance, breathability and durability to the fabric.

Fabrican embarked on this initiative to reduce reliance on virgin plastic and valorise an overlooked carbon-neutral resource, advancing the company's overriding goal to improve sustainability. In so doing, it meets demand from industry, fashion houses, and designers for sustainable manufacturing technologies.

www.fabricanltd.com



Fabrican's sprayable fabric created from naturally occurring waste seaweed

Incorporating AI: the future of medical writing services with Morula Health

By Morula Health

Morula Health is revolutionising the world of medical writing; we take pride in providing the highest quality services to our clients.

Over the years, we have had an unwavering dedication to excellence and our team has been working tirelessly to refine our internal operations and create a seamless process that guarantees superior results for our clients. With innovation being an integral part of our vision, we have recently incorporated artificial intelligence (AI) into our work and taken our expertise to a whole new level. It has enabled us to write and perfect content in record time, delivering exceptional quality work within a shorter time frame. This innovative approach ensures that our clients receive top-tier writing services while freeing up valuable time for our team to tackle even more projects. We look forward to the further advances we can make with this ever-developing piece of technology.

<https://morulahealth.com/>

LBIC welcomes these new clients to the Centre:

- Biomix
- Cellatoz Therapeutics
- Luna Therapeutics
- Nanloom
- Replica Biomaterials
- Surround Therapeutics
- Twig bio
- Vetirus
- Zenbiochem

recruitment across all sites and foster a collaborative environment with the Royal Veterinary College (RVC).

To enable LBIC's growth and optimise support for all its clients, Lucy Garnsworthy has been promoted to Head of Business Services. Lucy first joined LBIC and the RVC in 2010 and has developed an in-depth understanding of both business operations and client needs, which she will apply in the new role to ensure that LBIC remains the destination of choice for life science companies in London.

Further bolstering the LBIC team is the new Sterilisation and Waste Technician, Chelsea Graham-Benjamin. Chelsea holds a first-class BSc in Chemistry and has experience working in scientific, administration and education roles, giving her an ideal background to provide great service to LBIC's client base. Chelsea was recruited in conjunction with the LIFT programme run by four London councils to

create opportunities for local people in tech, digital, sciences and creative production. She provides essential services to clients including clinical waste processing and collection and delivery of lab equipment for sterilisation. Adam Rasmussen Arda will now allocate more time to progressing LBIC's sustainability agenda, a significant area for us all.

Client recruitment in 2023 has been equally strong, with eleven new clients so far – that is higher than the total annual figures from 2017 to 2022! A blend of virtual and physical clients, these companies are already finding value through their LBIC base, forming new connections and accessing services through the RVC and Business Support Network to accelerate their progress.

LBIC clients have also been attracting a lot of attention: when Sifted magazine named 14 European "techbio soonicorns to watch in 2023", two of the four UK-

based companies were LBIC clients. Evox Therapeutics was lauded for its treatment for life-threatening diseases using exosomes, while Ori Biotech was named a soon-to-be-unicorn for the second year running for its work developing an automated cell and gene therapy manufacturing platform. Elsewhere, Prokarium's recent financing for its lead oncology candidate ranked in the top five biotech venture capital deals in the first quarter of 2023. Baseimmune was named as one of the government's UK Life Science Innovators, selected as representing UK excellence across the life sciences sector for its work on next-generation vaccines.

If you would like to explore LBIC's services, please visit www.lbic.com.

Useful links:

Tribeca: <https://tribeca.london/home>

LIFT: <https://www.lifffutures.london/>



Amanda Keightley-Pugh



Chelsea Graham-Benjamin



a new kind of **medical writing** partner



Prokarium announces \$30 million financing to deliver lead programme into clinic

Prokarium has raised \$30 million in new funding to support clinical development of its lead oncology candidate in non-muscle invasive bladder cancer. The funding included participation from fellow LBIC client, Flerie Invest. Additionally, Prokarium has partnered with Ginkgo Bioworks to leverage its world-class Foundry and extensive Codebase to develop a bactofection platform technology.

“We are excited to advance our vision to create living cures,” said Kristen Albright, PharmD, Chief Executive Officer of Prokarium. “Proceeds of this financing will fund our lead oncology programme entering clinical development this year and enable platform expansion for the delivery of novel therapeutic payloads, including RNA, via our proprietary bacteria. With Ginkgo’s partnership and their expertise in

strain engineering and optimisation we look forward to working towards unlocking a new generation of immuno-oncology therapeutics.”

Prokarium’s lead programme has the potential to transform the treatment paradigm in bladder cancer, one of the costliest cancers to treat. The goal is to develop the new standard-of-care in a market that has seen little innovation in over 30 years and to offer advanced therapies as an alternative to the existing immunotherapy treatment using Bacillus Calmette-Guérin (BCG). Prokarium’s pipeline leverages evolutionary advantages of a proprietary strain of *Salmonella* and combines them with bespoke synthetic circuits to deliver diverse therapeutic cargo for difficult-to-treat cancers.

“We believe Prokarium is a truly differentiated company,” added Thomas Elderred, Executive Chairman, Flerie Invest. “The new funds and Prokarium’s partnership with Ginkgo Bioworks will accelerate the cutting-edge innovation essential to lead the advancements in the field of synthetic biology and immunotherapy for years to come.”

Ena Cratsenburg, Chief Business Officer at Ginkgo Bioworks, said: “Our partnership with Prokarium will utilise Ginkgo’s leading platform capabilities and services to pioneer technological developments that we believe will revolutionise the immuno-oncology field. Ginkgo is excited to partner with Prokarium to work to build a versatile *Salmonella*-based bactofection platform capable of delivering targeted, localised RNA therapeutics.”

New LBIC clients Cellatoz Therapeutics and Luna Therapeutics collaborate on drug delivery technology

LBIC’s collaborative environment has brought together new clients Cellatoz Therapeutics and Luna Therapeutics to expand their respective research horizons and to develop safe and effective products to address the challenge of unmet medical need.

Cellatoz Therapeutics is a biotech company with a pipeline of cellular therapeutics for neurological, musculoskeletal and immuno-oncology indications. Cellatoz Therapeutics combine novel stem cell science with integrated Chemistry, Manufacturing and Controls (CMC) and manufacturing at their cGMP facility in South Korea. Cellatoz Therapeutics aim to advance regenerative medicines through an allogeneic approach, enabling repeat dosing with fully characterised and consistently high-quality cellular products. Cellatoz Therapeutics recently received Phase 1/2a clinical trial approval from the Korean Ministry of Food

and Drug Safety for the treatment of peripheral neuropathy using neuronal regeneration promoting cells, with the trial commencing May 2023.

Luna Therapeutics have developed technology related to biodegradable, three-dimensional materials that can be injected into the body. The materials can be formulated with finely tuned parameters including size, porosity, stiffness, degradation rate and surface chemistry to assist with optimising products intended for parenteral drug delivery and tissue engineering.

Jaeseung Lim, CEO of Cellatoz Therapeutics and Prof. Richard Day, CEO of Luna Therapeutics met at the Advanced Therapies Congress 2023 in London to sign a memorandum of understanding for collaboration on the application of novel biomaterials for the delivery of cellular therapeutics.

cellatozrx.com/en
www.luna-tx.com



Prof. Richard Day, CEO of Luna Therapeutics and Jaeseung Lim, CEO of Cellatoz Therapeutics

Accelerating life science research with optimised multispecific antibody development solutions

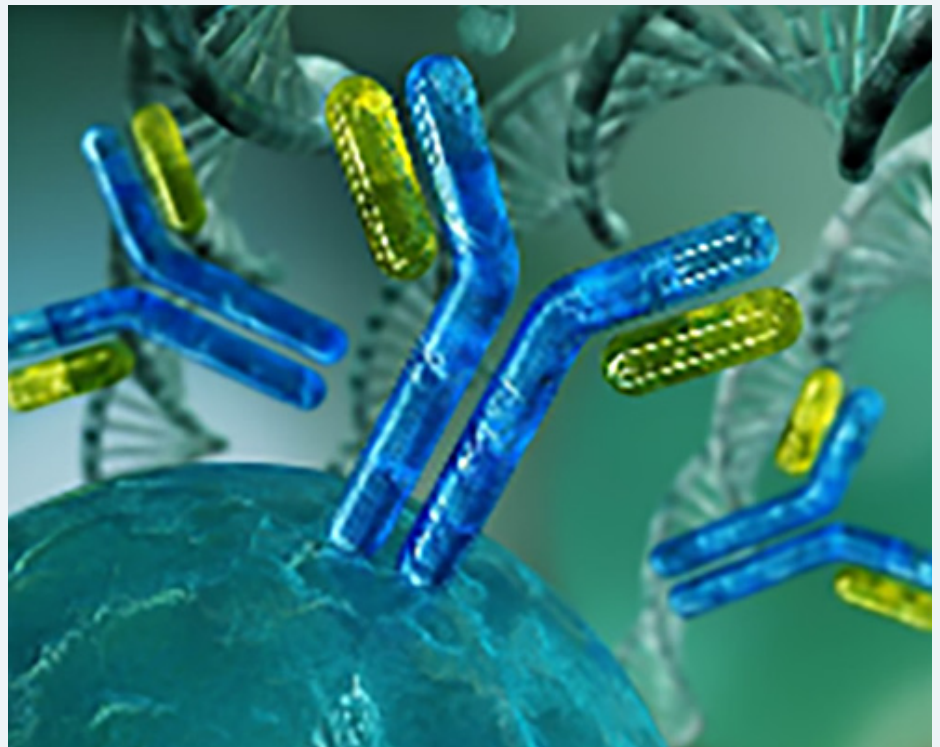


Multispecific antibodies, such as bispecific, trispecific, and tetraspecific antibodies, have become the rising stars in the field of antibody therapeutics. As a global leader in recombinant technology, Sino Biological is at the forefront of the bioreagents and contract research services industries, providing a comprehensive range of high-quality recombinant proteins and antibodies, as well as custom development and production solutions which include multispecific antibody development services.

Compared with traditional monospecific antibodies, multispecific antibodies have become a key focus area for biotech and pharmaceutical companies. Their many advantages include enhanced specificity and targeting ability, as well as better therapeutic effects. To date, many bispecific antibody drugs have been approved by the FDA worldwide, and more than 100 multispecific antibodies are being investigated in clinical trials. Key solutions for advancing multispecific antibody development offered by Sino Biological cover various phases of the development process.

Antibody Development. Antibody discovery is the starting point for the development of multispecific antibody drugs, and its results are of utmost importance. Sino Biological offers four major antibody development platforms (phage display, Beacon® Single B Cell Screening Platform, FACS Single B Cell Sorting Platform, and Hybridoma) and four major protein expression platforms (mammalian, baculovirus-insect, bacterial, and stable cell line development).

Antibody Optimisation. Once candidate antibodies are obtained from screening, they require optimisation and modification, ensuring the quality of the multispecific antibody drugs. Sino Biological provides one-stop services for



antibody humanisation and multispecific antibody preparation. The company has even established an AI-powered affinity maturation platform aimed at improving the affinity of antibodies, implementing machine-learning algorithms to predict the effect of mutations on antibody-antigen binding, and then validating the predictions in wet lab – thus ensuring a variety of optimised modifications and delivering high-quality antibodies to support research and development.

Druggability Assessment. Druggability is a key property of a molecule as it can affect the cost of the subsequent process of development and the risks during the clinical stage. Sino Biological has established an *in vitro* efficacy evaluation platform, and offers protein expression services, in addition to high-quality cytokines for cell proliferation inhibition assays.

Animal Model Evaluation. To ensure the successful preclinical development of multispecific antibodies, it is critical to establish animal models for the evaluation

of their pharmacokinetics, efficacy, and safety, which in turn relies upon the production of a large number of candidate antibody drug molecules. Sino Biological provides large-scale multispecific antibody production services for preclinical antibody drug production in addition to PK/anti-drug antibodies (ADA) antibody preparation services – thus supporting candidate molecule evaluation and pharmacodynamic experimental design.

Process Development Clinical Studies. To support the process development and clinical research of multispecific antibodies, Sino Biological provides a comprehensive range of products and services, including cell line development service, PK antibody development service, ADA antibody development service, and CHO cell culture media.

To discuss how Sino Biological can help guide you through your multispecific antibody development programme, get in touch at order_eu@sinobiological.eu.

Is your organisation compliant? Audits vs inspections

BY SHURENE BISHOP SIMON, PHD, CMIOSH, MISTR

Many times, we hear people using the word audits to describe the health and safety checks they have done, when they have really carried out inspections. It is important to understand their differences, and conduct both. An audit cannot substitute an inspection, and vice versa. Both are vital for management of health and safety and biosafety risks, to protect workers, the community, and the environment from harm.

What's the difference?

An audit is a deep analysis of the health and safety and biosafety management system. This means analysing levels of compliance on a range of matters such as policies, competence, procedures, planned preventative maintenance (PPM), waste management, and monitoring. The process involves gathering information by reading many documents and interviewing a variety of stakeholders, including staff. It is an extensive process that takes place over a few days. Audit frequency depends on internal policy and some organisations commit to conducting them every one to two years. Auditors must be sufficiently competent to gather the correct information and analyse it.

An inspection will mostly be a visual check of the working environment. It is not an analysis of the management system and not as detailed as an audit. It is a snapshot, in that moment, of hazards and risks that

need to be mitigated. Matters for inspection include waste segregation, safe storage of microorganisms and chemicals, and safety equipment. Depending on the size of the facility, inspections require less time and can be completed in a couple of hours. They take place more frequently within the year. Inspectors do not need to have the same level of competence as an auditor.

Why conduct them?

Scientific organisations come to us to conduct audits for reasons such as:

- ✔ It is a condition from their insurers
- ✔ Due diligence before purchasing a business
- ✔ Assurance as part of good governance
- ✔ To identify blind spots before a visit from a regulator
- ✔ To identify and understand any additional improvements to keep their people safe



Inspections are conducted to quickly identify hazards and risk and to mitigate them.

Our take-home message is that organisations must treat health and safety and biosafety audits and inspections differently. We encourage you to commit to doing both at the right frequency for your organisation. Contact Bishop Simon to get expert advice on what would best fit your company's needs.

Website: bishopsimon.co.uk

Email: info@bishopsimon.co.uk



Introduction to Blue Idea Consulting

We would like to introduce our newest client, Blue Idea Consulting.

Blue Idea Consulting supplies scientific consultancy services to pharmaceutical companies, medical associations and healthcare professionals. Since 2010, the company has successfully completed over 400 medical research projects.

Blue Idea's services include management of clinical trials, observational studies and epidemiological studies. They also offer evidence-generation strategy development and implementation, epidemiological and pharmaco-economic modelling and reporting, and systematic literature review and meta-analysis.

www.blueidea.co.uk

BLUE IDEA
CONSULTING

Bold Innovates brings investment readiness to LBIC BSN

LBIC is proud to announce the addition of Bold Innovates to its Business Support Network (BSN), offering investment readiness and sourcing solutions for life science start-ups and scale-ups in the UK and the EU. With a focus on bold innovations in therapeutics, medical devices, diagnostics, and digital health, Bold Innovates provides tailored support to help companies navigate today's challenging and competitive world of investments.

"We understand that the life sciences industry is rapidly evolving, with unique growth challenges and opportunities for start-ups and scale-ups," said Ipek Gunduz, Co-Founder & Partner at Bold

Innovates. "Our team of entrepreneurs, consultants, pharma executives, and academics possess a deep understanding of the obstacles that start-ups and scale-ups encounter during their growth journey. Coupled with our network of VC and angel investors, partners and advisers, we equip our clients with the tools and resources needed to accelerate scientific innovations that advance humanity".

Bold Innovates works closely with each client to achieve investor readiness through customised services such as market research, expert pitch preparation, and access to a network of potential investors and strategic partners. The team facilitates meaningful connections between innovators and investors

who share a common vision and investment goals.

Bold Innovates will offer LBIC clients a complimentary Discovery Call and preferential rates. Get in touch with the team via contact@boldinnovates.com to explore how Bold Innovates can help translate your innovation into commercial value.

www.lbic.com/strategy-consulting



New labs at 'LBIC: CVRM'

LBIC has opened new lab and office space at the RVC's Hawkshead site in Hertfordshire. Based at the Centre for Vaccinology and Regenerative Medicine (CVRM), the space offers SMEs the chance to access affordable state-of-the-art Cat 2 wet lab space co-located with world experts in vaccines and stem cell research.

LBIC: CVRM consists of four dedicated lab spaces (300-560sq ft) providing six air changes per hour, piped in CO₂ and N₂, lab benching and use of a shared office and meeting room. The RVC Hawkshead campus offers a wealth of resources for

occupiers, with access to Biological Services, clinical samples, shared equipment (including tissue culture facilities) and collaboration opportunities with specialist researchers and clinicians.

The vision for the CVRM is to facilitate collaboration and complementary access to the knowledge, techniques and technologies provided by the resident Principal Investigators (PIs) in core research areas. We hope to bring together top veterinary and human medical science researchers under one roof to advance the 'One Health' approach and to accelerate the development of new vaccines and cell therapies to combat non-infectious, infectious or genetic conditions in animals

and thus ultimately to protect humans and enhance animal and human welfare.

LBIC: CVRM is located in beautiful countryside with a nature trail, on-site restaurant and sustainable transport options including a free shuttle bus throughout the day to and from Potters Bar train station. Companies based at LBIC: CVRM will also receive all the standard LBIC client benefits, including marketing and networking opportunities, Business Support Network offers and access to placement students.

To discuss LBIC: CVRM, contact Amanda Keightley-Pugh: akeightleypugh@rvc.ac.uk

Virtual tenancy offers flexible London base

For companies looking to establish a London base, it is easy to think that a physical office is required. However, many companies find it simpler to take on a 'virtual' tenancy at LBIC, giving access to meeting room space when needed for important face-to-face meetings, but without the commitment and setup required with dedicated office space.

LBIC's experienced team has developed the virtual package to suit the varied needs of life science companies of all sizes.

Benefits of an LBIC Virtual tenancy

- A Central London address less than 10 minutes' walk from the international transport links of St Pancras International Station
- One-year complimentary Gold membership of One Nucleus, the international membership organisation for life science and healthcare companies
- Discounted client rates on meeting rooms, catering and video conferencing facilities
- A dedicated telephone line answered in the client's name and redirected as needed
- Mail collection and redirection
- Courier bookings at client rates
- Business Support Network to assist with doing business in the UK
- Access to RVC equipment and facilities, including the stunning Lightwell café
- Visible profile within LBIC and through our marketing and communications
- Option to cancel at any time, with just one month's notice period


The set-up process is quick and straightforward

Contact us at lbic@rvc.ac.uk or call +44 (0) 20 7691 1122 today to enquire about becoming a Virtual client.

* Additional charges may apply for certain services. A full list of charges can be supplied on request. Prospective clients will be subject to due diligence checks by LBIC management.


Would you like to feature in our newsletter?

If you would like to contribute to a future issue of LBIC News, contact **Lucy Garnsworthy** on +44 (0) 20 7691 0982 or email lbic@rvc.ac.uk



London BioScience
Innovation Centre

WHERE ENTERPRISE COMES TO SUCCEED



Scan the QR code for instant access to our website

Contact us

LBIC has been supporting life sciences companies since 2001. Today we host around 60 companies, ranging from entrepreneurial start-ups to more established UK companies and overseas subsidiaries from Europe, North America and Asia Pacific. The Centre is owned and operated by the prestigious Royal Veterinary College, one of the independent Colleges of the University of London.

The Centre is a 10-minute walk from St Pancras International for Eurostar services and The Francis Crick Institute.



Management Team:

Rich Ferrie
Chief Executive

Janette Richardson
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