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Autumn/Winter 2026

ONE NUCLEUS HIGHLIGHTS

With a Review of ON Helix 2026

Highlights from our support for institutions, companies, and individuals in the life sciences sector via local, UK-wide and international connectivity.

one nucleus

Babraham Research Campus

From idea to impact

"Capital and confidence, not just chemistry and biology, are what turn European research into global companies. The ecosystems, teams and investors who understand that distinction and act on it early, are the ones positioned to capture the value Europe's science base is already creating."

Rich Ferrie, CEO, Babraham Research Campus



Babraham Research Campus is home to over 60 bioscience companies and the Babraham Institute, providing the infrastructure, networks and commercial support that help translate early-stage science into investable businesses.

Interested?

Discover, innovate, grow & thrive @Babraham

Welcome to One Nucleus Highlights Autumn/Winter 2026!

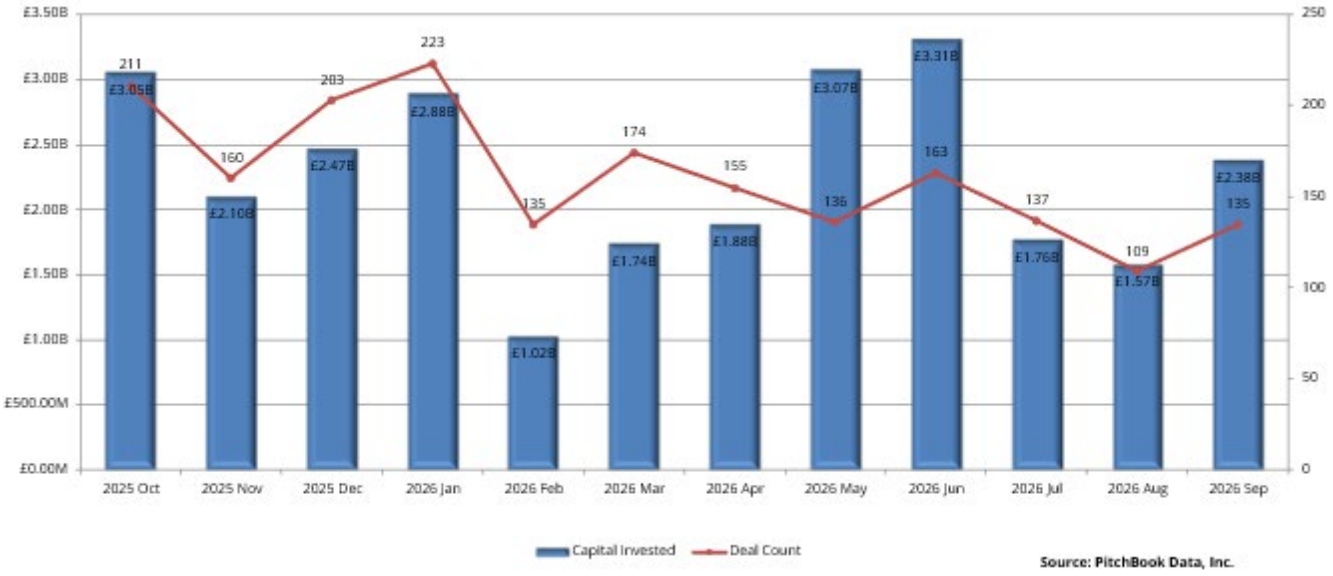
I am delighted to welcome you to our latest publication. This is our chance to report on some of One Nucleus's delivered activities, with a particular spotlight on some key achievements by our team, our members, and the local ecosystem. The publication also provides an opportunity to share with our network some planned activities and investments that One Nucleus is making to add depth and precision to our support of our members going forward. We welcome your feedback on any of these, of course.

To set the scene, I share some industry data and remarks illustrating the current deal and investment trends and how One Nucleus feels this may impact our members.

Dealmaking:

Whilst our members are widespread both geographically and phenotypically, we are fortunate to have our roots in two of the most successful life science clusters to date, Cambridge and London. Whilst 2026 remains a mixed news year. Investment, M&A and IPOs are all seeing upturns compared to the previous year, but these deals are differentially focused on selective technology and therapeutic areas as well as stage of development. If one considers what some key drivers could be for these patterns, one might consider whether the impending patent cliff in the Pharma industry is stimulating M&A for example. With patent cliffs looming in the next 5-7 years, this may explain why M&A has focused on later stage assets, and it's not simply a matter of seeking de-risked assets. That said, with later-stage assets available from regions including North America, Europe and China and numerous large investment funds progressing towards the end of their 10-year cycle, then investing moving away from early-stage assets and technologies may not simply be about risk appetite alone, although that is a key factor as always. Perhaps with the plethora of innovation opportunities available and factors such as those above influencing choice of deals, it is worth remembering that assets in biopharma are generally bought rather than sold.

As the graph below illustrates, the global deal flow of venture investment into drug discovery in the year to 30 September 2026 has seen 2,000 deals securing a collective $27Bn in capital.



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Some standout deals, demonstrating the diversity in technology and the stage of development made in the region in recent months, are listed below.

- Looking more regionally at the One Nucleus home patch of London-Cambridge, there were 83 deals across 69 companies
- from 208 investors the top ten deals by value are as follows:

Company	£Raised	Company	£Raised
Isomorphic Labs	1.55Bn	T-Therapeutics	67M
CellCentric	162M	Immuntrin	65M
Avantgarde	102M	R1 Therapeutics	57M
Artios	86M	Beacon Therapeutics	55M
RQ Bio	85M	Exciva	51M

A Time for Optimism

There has been a significant shift in momentum and trends over the past twelve months. In addition to the venture investment rounds detailed above, major industry players such as AstraZeneca have announced key strategic decisions that are likely to impact many One Nucleus members and stakeholders. As well as announcing a planned investment of $50Bn in the US (July 2025), AstraZeneca has more recently announced a commitment of $15Bn to be invested in China over the coming year and a $1Bn+ collaboration with CSPC in the obesity field. AstraZeneca is not on its own, however. Major collaboration deals have also been announced by the likes of Merck (MSD) and Boehringer over recent months. This is a key trend as China increases its share of the global bio-pharma market. What this means for investment into the UK-based R&D remains to truly be seen, but perhaps there are lessons that can and are being learned in real time.

Commonly cited as a driver of the China deal flow trend is the combination of lower costs of innovative R&D and speed to key proof-of-concept data. The trend and rapid rise of China is leading some to question whether this will challenge the US crown as the leading market and life science innovation geography. Time will tell, but perhaps the challenge to the US position will trigger an opportunity for UK life science companies with our longest and most trusted biopharma trading partner in this field whilst looking to Asia more widely as an additional option to progress value creation, both for investors and patients.

The growth of venture creation and investment into the area of tech-bio, leveraging AI to move faster towards disease mechanisms, target selection and drug discovery is giving rise to immense excitement in many quarters as well as noises of caution from others. Is the future one of autonomous labs and if so, what role will humans play and what will be the key bio-currency? Perhaps invention, the unexpected insight those rare scientists see that their skilled peers do not, is not so scale-able that putting greater effort behind it results in a step-change in understanding. Once observed or invented, automation and firepower absolutely accelerate evaluation of the hypothesis, but the breakthrough idea may turn out to be the bio-innovation currency of the future. If that is the case, the UK should be optimistic with its track record of scientific inventors, evidenced by the number of Nobel Prizes awarded to UK-based researchers and the global impact of their insights. Furthermore, the UK has made significant progress in areas such as medicines regulation, clinical trial delivery and the deployment of the new tech-bio technologies, aided by its world-leading strengths in data science and technology sitting proximal to life science leaders and hence enabling the Medici Effect to propagate innovation.

Rising stars in the space are shown overleaf:

Investing in Member Support

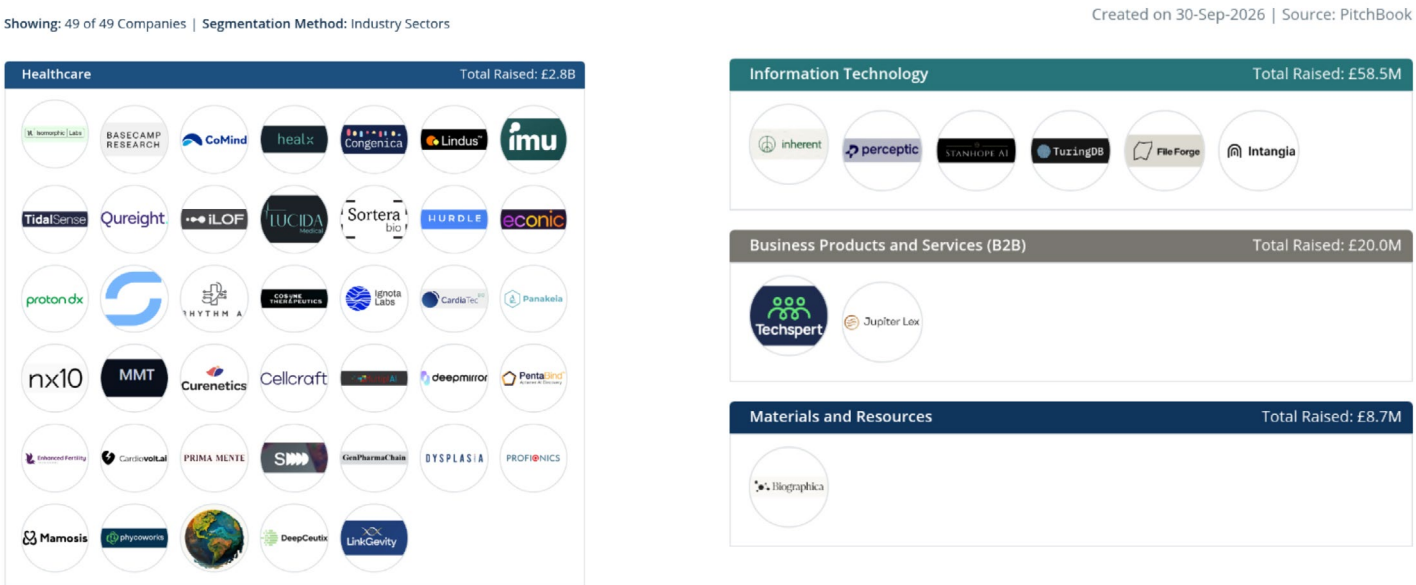
The ongoing challenges and trends within the sector provided One Nucleus with the impetus and support to invest in additional avenues this past year to support member companies, their employees and the ecosystem as a whole. The investments have included:

- Subscription to both PitchBook and Biotechgate to enable our members to access leading commercial intelligence datasets to target their investment and business development outreach.
- Subsidising emerging company pitching and participation at Genesis 2025
- Continuing our partnerships with Informa Connect (formerly EBD Group) and Life Science Nation to gain access and profile for our members at BioEurope and RESI conferences, respectively.
- Launching the Going for Gold initiative
- Increasing our business development team to offer greater support to members, particularly in London.
- Co-sponsoring the BioCentury Grand Rounds Europe conference as part of the Regional Host Committee of stakeholders.

As you read through the pages of this publication, you will see how One Nucleus is always conscious that it is fortunate to be the custodian of an immensely impressive network of companies, thought leaders and individuals. Very much the goal of One Nucleus is to nurture a trusted environment for business relationship building, knowledge sharing and ultimately to supercharge deal flow between our members and the wider life science sector.

You will find later in the publication more details on how we are deploying access to these additional resources, tailoring support to individual member needs, and evolving the membership fee structure to reward those that contribute and seek to build strong bridges to opportunities for our members. At this point, I shall reiterate the welcome to this snapshot and insight of our One Nucleus family and hope to see you join us soon.

Rising stars in the tech-bio space in the London-Cambridge Region





Tony Jones, CEO, One Nucleus

About One Nucleus

Supercharging One Nucleus Members

The goals and roles of any non-profit membership organisation are required to adapt and evolve as the external environment impacts the critical needs of its members and the support they require. In an era of data-driven decision-making, increasingly complex regulatory pathways, globalisation of innovation and a competitive innovation investment landscape, the One Nucleus focus has remained sharply on enabling our members to be informed, connected and visible. To be an effective enabler of member success, One Nucleus prioritises three key areas of member support:

Connectivity & Insight

One of the key benefits of joining One Nucleus is to increase your competitiveness in the market. Members achieve this through opportunities including:

- Accessing key industry data and contacts, including via the Going for Gold initiative
- Attending One Nucleus events for peer-to-peer connectivity to uncover advice and intelligence from those travelling a similar journey
- Attending One Nucleus insight roundtables and webinars to stay abreast of the latest best practice.

PitchBook

BUSINESS WEEKLY

BIOTECH GATE
BUSINESS DEVELOPMENT DATABASE









Accessing Deal Flow Opportunity



Enabling members to be competitive ultimately needs to be put to the test at investor and partnering events where those seeking to access their valuable expertise and proprietary technology through equity investment, R&D collaborations or outsourcing are present. One Nucleus seeks to enable such access through activities including:

- Pitching sessions at One Nucleus conferences (ON Helix and Genesis) and BioWednesdays
- Collaboration with global investment conference provider Life Science Nation via discounts and profiling opportunities at the RESI (Redefining Every Stage of Investment) conference series
- Collaboration with global bio-partnering conference organiser Informa Connect (formerly EBD Group) for discounts and profiling opportunities at events including BIO Europe/BIO Europe Spring, Biotech Showcase and ChinaBIO
- 1-2-1 introductions and discounts at numerous other conferences such as BioTrinity, NLSDays and more.

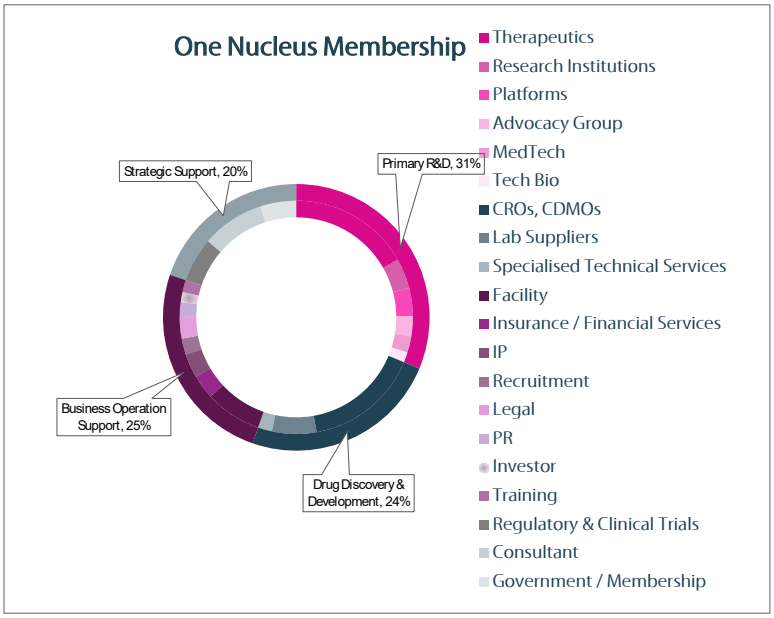
Member Resources

Membership of One Nucleus opens up a range of benefits and resources member companies can use for free or at a heavily discounted rate. These services are all designed to support members in being the best-performing and hence most attractive to investors, partners, clients and employees, business they can be. Such resources include the following:



- **Savings** – cash is a vital resource, so using it wisely reflects well on any organisation. Through the Purchasing Scheme and Marketplace, members can access significant discounts on, eg, lab supplies, services and third-party events.
- **Learning & Development** – One Nucleus offers a portfolio of training courses ranging from technical compliance courses required for health and safety compliance to non-technical skills courses, including presentation skills and project management. One Nucleus also hosts a Training Sat Nav on the website to enable members to identify training courses offered by other providers.
- **Profile Raising** – ensuring visibility in the eyes of your market is key, and One Nucleus provides this for members through the free resource of posting news, jobs, events and blogs to the website, and inclusion in publications such as this ON Highlights publication and eNews.
- **Facilities Management** – whether identifying the best location, negotiating your lease, designing and fitting out your laboratory/office, running the facility or downsizing and dealing with dilapidation requirements, One Nucleus, supported by a team of external contractors, can advise companies on every aspect.

Diversity is the Driver of Innovation



Much is made of the belief that diversity of input and the interface of disciplines are where innovation happens. This Medici effect is often a result of like-minded experts addressing the same problem from different fields or experiences.

Thinking beyond this simply in terms of technological innovation, the same principle can apply in life sciences when it comes to best practice in the business aspects also.

Entrepreneurs will routinely challenge accepted dogma of how things are done, and they can be ably supported by knowledgeable professional services advisors and dealmakers who have seen a plethora of solutions to any encountered business challenge.

For this reason, One Nucleus encourages a diverse membership base representing each step of the ideation to commercialisation pipeline.



Genesis 2026: Thursday 10 December 2026, London

Continuing the momentum and taking feedback on board, Genesis 2026 will retain, and build upon, the successful elements introduced at the December 2025 conference. Key highlights this year will be:

- The keynote programme will feature thought-provoking discussion and debate on industry trends, emerging technology adoption and business models, complemented by one-to-one fireside chats examining the human elements of the sector, including the patient perspective and talent development.
- The Company Showcase will see the shortlisted companies in the One Nucleus Annual Award categories share their innovation story with delegates seeking to learn about some of the hottest rising starts in the sector.
- Delegate connectivtiy and pre-arranging 1-2-1 meetings will be facilitated via the Networking App facility.
- Brand Positioning for those seeking to be seen as leaders in their field and the ideal partner is available via the Sponsorship and Exhibition options.
- The London Bio-Innovation Week 2026, a collaborative effort across several non-profit membership groups in the field will see a series of satellite events enabling attendees to learn, connect and collaborate more widely across the space.

Remaining with the theme of 'Maximising Returns from Life Science Innovation' the conference will again assemble R&D, investment, advisory and policy-making leaders to discuss how the sector is performing, best practices and future outlooks. Questions on the agenda for 10 December include:

- Who were the Winners & Losers of 2026?
- How can you scale a UK biotech without selling out to a richer international counterpart?
- What is the next frontier in bio-innovation?
- How relevant is the current biopharma business model in the current era?
- Is the UK a rare gem?
- Will the innovators, investors and regulators of the future be human or machine?

Build Your Own Solution:
Achieving the desired outcomes from attending Genesis absolutely depends on your goals, needs and aspirations. Whether your goals are to:

1. Help shape the discussion about the future of our industry;
2. Showcase your company's value proposition to investors, partners or advisors;
3. Increase profile and engagement with potential customers;
4. Catch up on the latest developments in the sector;
5. Network with your peers as you take stock of developments ahead of the festive break.

One Nucleus has taken a flexible approach to enabling all sponsors, exhibitors, and delegates to choose the participation package that is right for them, their needs and their budgets.

Visit www.genesisconference.com for the latest updates and participation offers while availability remains.



Genesis Conference 2025 in Review

The 25th edition of Genesis saw a step change in dynamic, format and attendee mix as the event continued to adapt to the evolving Life Science investment, technology and deal-making landscape. The plenary programme expert speakers debating key topics and the new company showcase pitches provided a depth of content from the platform and fuelled one of the most energetic networking and exhibition areas seen for many years at a conference.



Creating a London Bio-Innovation Week

As one would expect, the thought-leading speakers raised a number of key themes and challenges, including:

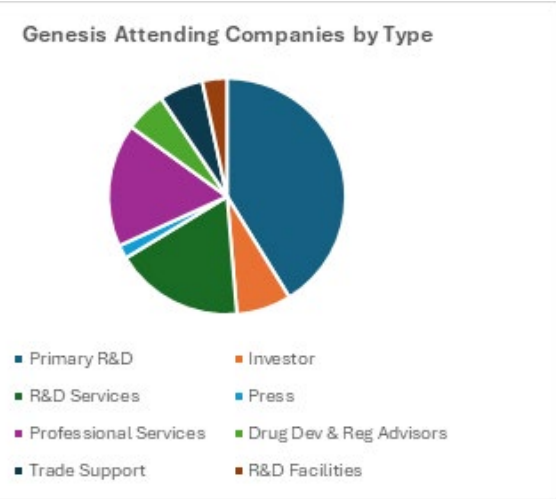
- The industry needs to recover from the current piñata model with the sticks of Inflation Reduction Act, and Most Favoured Nation, patent cliffs, tariffs and financial headwinds suggesting a challenging year ahead but one of immense opportunity.
- Choose your geography wisely to access public sector support and why reforms in the UK are an incentive to get the 'UK to back ourselves'.
- The future will see increasingly interdisciplinary approaches to innovation and varied business models to harness the value of technologies such as AI and Quantum Computing to deliver novel modalities and effective combination treatments.
- The two-way learning opportunity across rare disease and common disease R&D highlighted how greater support and collaboration to ensure collated data and reported outcomes in rare diseases would reassure regulators and payers, whilst onboarding insights from rare disease patient groups on how to engage patients and their families could transfer clinical trial patient engagement from recruitment to proactive inclusion.
- In all collaborations and alliances, things change. Resistance is thus futile. Be mindful to set clear outcome expectations and resources input that both sides are happy with, have a mechanism for discussing adaptations and always maintain open communication.
- UK government and UK investors need to match the confidence in UK excellence shown by international investors and partners when it comes to investing for growth and scale in UK companies, not investing to exit.
- A true call to action emerged from listening to the work of the Patient & Public Voice East Genomics. Projects focused on reaching different ethnic groups, addressing patient fears, innovation in patient experience and finding routes to influence senior medical and public health decision-makers with true real-world input are all currently lived challenges for patients and their families.
- With the ever-increasing rate and technological convergence in bio-innovation, leadership of the future requires excellent ringmasters who maybe do not know how to do all the tricks but are able to drive team performance internally whilst communicating externally to reassure regulators, investors and patients.
- Looking to the future demographics and technological advances by 2050, we could have new medicines that are curative, more informed prediction and prevention coupled with data-driven evidence that enables value-based pricing and reimbursement.

The recordings of all keynote sessions are available to watch on the One Nucleus YouTube channel.

Genesis 2025 Exhibitors

Genesis 2025 Sponsors

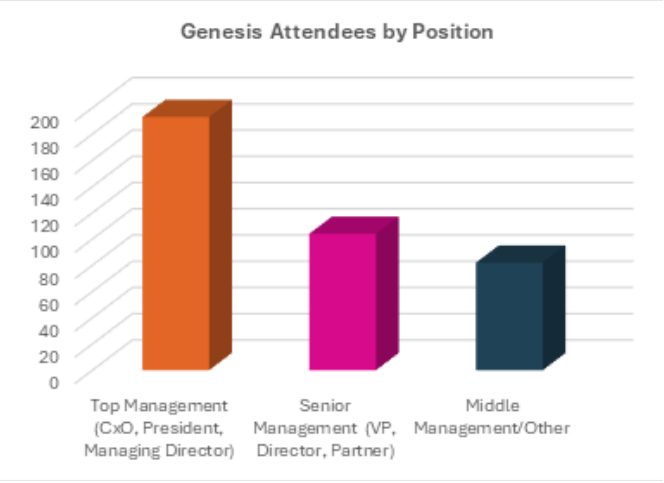
Key facts & Figures for Genesis 2025:



26% year-on-year growth in attendee numbers
43% year-on-year growth in the number of attending companies
17% year-on-year growth in proportion of Primary R&D companies attending
40 plenary programme speakers
40 Company Showcase pitches
20 Exhibitors showcasing leading-edge Research & Development, facilities provision and professional services
7 Genesis Fringe sessions

London Bio-Innovation Week (LBW2025)

Genesis was an integral element of the inaugural LBW alongside ELRIG, SLAS, Life Science Integrates and Life Science Nation all delivering events that week to bring the translational research and investment community together.



New Initiatives Launched in 2025

Appreciating the challenges One Nucleus members face in accessing the key commercial data sources that enable them to:

- Target the right investors, R&D partners and customers effectively
- Research and build a credible value proposition for their company pitches
- Benchmark their valuations and potential against sources used by investors, Pharma and analysts.

One Nucleus has negotiated access to both PitchBook and Biotechgate to add to its own intelligence and connectivity in order to support members with two new initiatives alongside evolving the membership fee structures to reflect a modern two-way relationship with our members.

Going for Gold

Helping our members navigate their journey to success through accessing data, connecting to the right advisors and making the most of the entire One Nucleus membership.

Key elements are:



- Aimed at R&D-intensive, IP-rich companies
- Dedicated 2-hour **One-ON-One** information session
- Access to databases via One Nucleus including Pitchbook and Biotechgate
- Pitching opportunity at the annual Genesis conference, BioWednesdays and other One Nucleus Events
- Enhanced profile in the One Nucleus Gold Member Lookbook
- Includes standard One Nucleus Gold Member benefits.

One-ON-One

All One Nucleus members have access to these sessions, which aim to create a customised support package for engagement with One Nucleus.



Key elements are:

- Commercial intelligence deep dive
- Evaluating the breadth of One Nucleus support available
- Identifying external expertise required
- Actions summary and report
- Held in-person or online.

Over the past year, One Nucleus has tailored this support to deliver curated insights into partnered-asset opportunities, investment and deal-making activity across the East of England and London focused on specific research-related areas, comparator analyses aligned to specific members' needs and support on how to build visibility and credibility within the UK life science ecosystem.

Supporting One Nucleus Members at BIO-Europe

BIO-Europe is one of Europe's premier biopharma partnering conferences, bringing together thousands of industry leaders from around the world for one-to-one partnering meetings and networking.

Through the One Nucleus–Informa Connect collaboration, members are enabled to make the most of BIO-Europe by helping them to reduce their costs, raise their profile and connect with the international Life Science community.

Registration Discounts
One Nucleus members receive a 12% discount on registration for BIO-Europe events.

Enhanced Profiling Opportunity
Whether attending in person or not, members can boost their visibility through a dedicated package which includes company logo on the on-stand screen at the One Nucleus stand, display of business cards and collateral and promotion via One Nucleus social media and newsletter ahead of the event.

Home Base
The One Nucleus stand provides a landmark for members to visit between their partnering meetings, helping them to maximise their engagement with other members and non-members seeking to engage with our network.

One Nucleus was proud to represent our members at BIO-Europe Spring in Lisbon, Portugal in March 2026, showcasing the following organisations taking advantage of our Enhanced Profile offer – LBIC, Arc Group (Advanced Research Clusters), Symphorna, Vernalis, Prime.io, Artemida Pharma, Pharmidex and Breakthrough Properties.

The One Nucleus team is already looking forward to BIO-Europe 2026 in Cologne with the latest delegation, including TCS Biosciences Ltd, Thermo Fisher Scientific, Pharmagene Discovery Services Limited, Medicines Discovery Catapult, Alithia Life Sciences, Agility Life Sciences and others.



Boston Bootcamp 2026 Key Takeaways



The One Nucleus Boston Bootcamp once again brought together an ambitious cohort of UK life science innovators to immerse themselves in one of the world's most dynamic biotech ecosystems. Following the judges' selection process, ExpressionEdits, Monument Therapeutics, Profionics and Stick Therapeutics were selected as this years' winning companies to participate in the trip to Boston on the 27-30 April 2026. Joining the winners were companies that entered the competition and opted to self-fund their participation including Luvida, RNera Bio and Quaisr.

Across three days of expert discussions, networking opportunities, pitching opportunities and peer exchange, there was one message that stood out clearly: Boston is an impressive ecosystem that remains full of opportunity for accessing a clear route to scale, but success requires the right support network, clarity of how you stand-out and careful preparation to show how you are positioned to progress to the next key value inflection point.

Fundraising is an important motivation for participating companies, but the value of the Bootcamp often extends well beyond securing investment alone. Participating companies have a range of motivations for taking part, whether that is seeking collaborations, fundraising, clinical development or establishing a fractional, on-the-ground presence. The Bootcamp helps participants to identify and engage with the right advisors for their specific needs, while providing them with an opportunity to build their presence and networks in the US.

Key Takeaways from the Boston Bootcamp 2026

Capital efficient opportunities

Compared with last year's Bootcamp, sentiments on the ground felt more optimistic. It was encouraging to hear that US market conditions were beginning to move again, leading to increased capital deployment that was translating into hiring activity and company growth. It was also encouraging to hear that investor syndicates were showing greater flexibility, with a US presence not always viewed as an essential pre-requisite for investment. One notable takeaway was the contrast in market cadence. The US ecosystem operates with greater urgency, with investors and companies often moving more quickly and showing a higher tolerance for risk.

Finally, the significant vacancy rate across parts of the market were positioned as an opportunity for companies looking to establish or expand a presence in Massachusetts.

The UK Must Continue to Sharpen its Value Proposition to the US

A key reflection from last year's Bootcamp was the need for the UK life sciences sector to do more to articulate the unique strengths it brings to the Boston ecosystem. That message felt even more relevant this year, against a backdrop of intensifying global competition for venture capital and China's growing presence in the life sciences and innovation landscape.

While the scale of Massachusetts' life sciences ecosystem dwarfs that of the UK, this year's Bootcamp demonstrated that it remains open to new ideas, expertise and innovation from beyond its borders. For the UK, this presents both an opportunity and a challenge: to be bolder in communicating the distinct value it can bring to Boston, particularly when the city can draw on world-leading science from within its own ecosystem, and an increasingly diverse range of international sources of innovation.







The third day of the Bootcamp provided an opportunity to put this into practice, showcasing the breadth and quality of the UK's drug discovery capabilities and research ecosystem. The programme gave Boston-based participants insight into both the scientific strengths already established in the UK and emerging areas of innovation, with the Milner Therapeutics Institute, Domainex, Advanced Research Clusters, Babraham Research Campus and Metrion Biosciences representing and championing UK excellence.

Speed is King
The FDA remains one of the world's most influential regulatory authorities. Under the Trump administration, the agency is undergoing significant changes and policy shifts, creating both uncertainty and potential opportunities for companies seeking to navigate the US market. Participants saw encouraging signs of openness to externally generated clinical data, while recognising that areas such as cell and gene therapies continue to require particular caution, and careful regulatory engagement. It is important to stay up to date if you are planning to engage at all. There was also recognition of the increasing expectations around the depth and quality of clinical data required to attract US investment. For many UK biotechs, the challenge is balancing the need to generate sufficient evidence to secure the next round of funding with the depth of capital required to reach those milestones.

Innovation and Partnering is Becoming Increasingly Global
The Bootcamp reinforced that innovation increasingly depends on how effectively companies can move across borders and connect with investors, regulators, partners and customers in different markets. It highlighted the important role of international connectors such as MassBio and the British Consulate General Boston in building this connectivity, helping ambitious companies navigate complexity and reduce the friction of entering new markets.

In today's life sciences sector, success is no longer determined solely by the strength of the ecosystem in which a company is based, but by its ability to operate globally accessing talent, capital, expertise, patient populations and commercial opportunities wherever they exist.

Unexpected Insights
Attendees also derived value from the practical, often unexpected insights that emerged throughout the programme. Sessions exploring topics such as waiver of privilege and the use of AI tools highlighted the importance of understanding the governance considerations involved in cross-border transactions and engagement. In some cases, the differences between US and UK law can appear relatively subtle, but misunderstanding them can have significant consequences for a business. The Bootcamp provided companies with the opportunity to understand these practical considerations early, helping them navigate the complexities of operating across markets with greater confidence.

The Bootcamp Creates Value Through its Own Network
Beyond the formal sessions, many participants reflected on the value of the peer network itself. The Bootcamp not only connected UK innovators with Boston expertise, but also strengthened relationships across the UK cohort, creating new opportunities for collaboration and shared learning, whilst also creating friendships.



Finally, a huge thank you to our 2026 sponsors and supporters, whose contributions made the Bootcamp possible. From bringing together the content and sharing their expertise, to providing the spaces and environment for meaningful conversations to take place, their support was instrumental to the success of the programme. Our sincere gratitude goes to Wolf Greenfield, Mewburn Ellis, Tunnell Consulting, RSM, Winston Taylor, TalentMark, Knight Frank, Cresa, Gunderson Dettmer, BioMed Realty, MassBio, Life Science Nation, Orrick and the British Consulate General Boston.

ON HELIX



by Alicia Gailiez, Business Development Manager One Nucleus

ON Helix 2026 brought delegates together for a day of presentations and panel discussions centred around the overarching strategic theme of “Disrupting Bio Innovation.”

The programme told a story of how disruptive innovation is reshaping the translational research landscape, from advances in therapeutic modalities to AI-enabled acceleration, the growing adoption of mRNA based therapeutic development, non-animal models as part of the drug development infrastructure and the emergence of globally distributed partnerships as powerful drivers of innovation.

Across the day, a number of key messages and challenges emerged:



- Drug discovery is becoming an increasingly multi-modal industry, spanning a growing range of therapeutic approaches. The future, however, is unlikely to belong to any single modality. Instead, success will come from matching the right modality to the right biological problem.

- mRNA is moving well beyond vaccines and toward a much broader therapeutic platform. A key technical obstacle in mRNA is delivery, and competitive advantage may increasingly come from getting the right payload to the right cell for the right length of time. Building a proprietary platform around this solution will be key for navigating a rapidly changing patent landscape.

- The integration of genomics, multi-omics, advanced imaging and other biological data is becoming central to how we understand disease and identify new therapeutic opportunities. The expansion of the Wellcome Genome Campus is an excellent example of how the right infrastructure is being created to combine the data capabilities and multidisciplinary expertise needed to turn this convergence into a more integrated, data driven model of drug discovery.

- AI is demonstrating value across the early stages of drug discovery, from target identification and lead generation to optimisation. However, considerably less investment is being directed towards applying AI to the development stages that follow. If AI accelerates discovery without addressing the downstream clinical development bottleneck, it could simply make that bottleneck more pronounced. The ambition should therefore be to extend AI across the entire drug development value chain, particularly improving the predictability of clinical translation for innovative medicines.

- Non-animal models, including organoids and microphysiological systems (organs-on-chips), will become genuinely disruptive when they generate evidence that can change drug development or regulatory decisions. Several factors are helping to accelerate this shift, including growing regulatory engagement and increasing confidence in their ability to generate decision-relevant evidence.

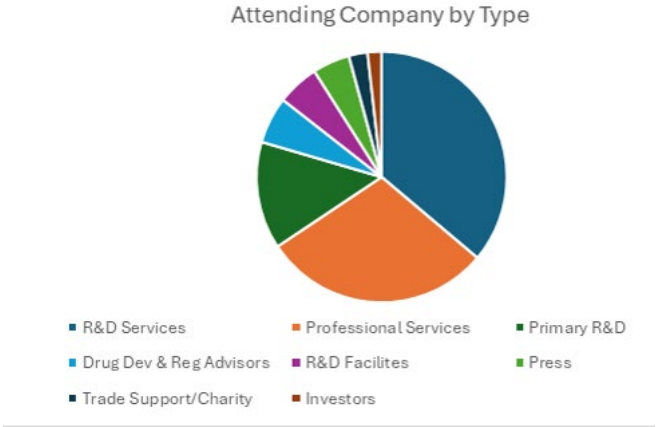
- AI and alternative models are more likely to augment traditional approaches initially than replace them outright. Regulators need to understand where data comes from, how AI models reach conclusions and how they are validated. Humans are expected to remain firmly in the loop, particularly where patient safety is involved.

- Engaging with the US biotech ecosystem can strengthen UK companies well beyond access to capital. The Boston Bootcamp demonstrated the value of immersive exposure to US investors, regulators, advisers and peers in sharpening business strategy, strengthening regulatory and IP readiness, improving investor communication and building the confidence and networks to scale a globally competitive biotech.

- Europe does not lack scientific innovation; it needs to become better at scaling and commercialising it. Connected innovation ecosystems that bring together infrastructure, capital, talent and commercial expertise will be critical to moving promising science more efficiently from discovery through to development and commercialisation.

- The life-sciences ecosystems of the future will compete on connectivity, not simply scale. Success in moving innovations from discovery to market depends on how effectively companies can access the right science, talent, capital, infrastructure and specialist partners, locally and globally. For the UK and Europe, this means strengthening connections between existing clusters and being bolder about the capabilities where we can lead, while making it easy to connect to expertise elsewhere.

The recordings of all presentations and panel discussions are available to watch on the One Nucleus YouTube channel.



Senior leadership was strongly represented, with approximately two-thirds of attendees being top or senior management.

ON Helix 2026 Pitching Day

Life sciences innovation rarely happens in isolation. It thrives in an environment where innovators can connect, build relationships, exchange ideas and learn from those who have navigated the complexities of turning innovation into impact.

As part of the ON Helix Fringe Event series, One Nucleus collaborated with the Wellcome Genome Campus to host a pitching session that gave TechBio companies the opportunity to showcase their innovations and engage directly with experienced industry experts. The session provided constructive feedback and practical insights to help companies refine their pitches, strengthen their messaging and sharpen their value propositions. By building confidence in how they communicate their innovation, One Nucleus helps companies become the best versions of themselves when engaging with potential investors and seeking the funding needed to take their innovations forward.
Support began before participants even took to the stage. A pre-event pitching clinic, delivered by Digital Quality Associates, gave companies the opportunity to explore questions around compliance, data management and quality risks before they became costly issues to address. Founders sought expert advice on challenges already on their radar, while also being introduced to issues they may not yet have considered.

One Nucleus was delighted to welcome the following companies to the pitching stage: bit.bio, Carocell Bio, Isoform Oncology, HotHouse Therapeutics, Farbro5, Nomad Doc Travel Health, Neobe Therapeutics, Synthistat, Spliceor, AmnioCam, Gramics Bio, 3D and 3Rs, and Cambridge CardioMatrix. KQ Labs also joined the session to highlight the opportunities available through its programmes for data-driven health start-ups.

Save the date for ON Helix 2027 | From Discovery to Impact | 27 May 2027 | Cambridge

BioBeat26: Reflections on the Conversations
Shaping Life Sciences



by Philippa Clark, Director of Business Development, One Nucleus

When I sat down to write this article, I found myself thinking less about individual sessions and more about the conversations that happened in between them. Of course, there were plenty of insights from the stage. We heard perspectives on financing biotech companies, rare disease innovation, artificial intelligence, and leadership. But what stayed with me was how often the same issues surfaced, regardless of the topic being discussed.

Whether people were talking about investment, patient engagement, or business growth, the conversation kept returning to adaptability, collaboration, and the importance of delivering real-world impact. As BioBeat entered its next chapter as part of the One Nucleus conference portfolio, those discussions felt particularly timely.

Adapting to a New Funding Reality

One discussion focused on the realities of building and financing biotech companies in today's environment. The mood was realistic, but far from pessimistic.



Nobody pretended conditions were easy. Capital remains harder to secure than it was a few years ago, and investors are asking tougher questions. At the same time, there was a feeling that companies are becoming more focused and more resilient as a result.

Several speakers talked about the importance of having a clear commercial strategy from the outset, understanding where value will be created, and remaining disciplined about how resources are used.

I was also struck by the number of conversations around alternative funding routes. Venture capital remains critical, but many organisations are now combining traditional investment with grants, angel networks, corporate venture funds and other non-dilutive sources. For many early-stage companies, that diversification of capital source is increasingly important.

Artificial intelligence surfaced repeatedly throughout the day, too. Interestingly, the discussion was no longer centred solely on discovery and research. Increasingly, organisations are exploring how AI can help make smarter decisions, improve operational efficiency and support growth. What struck me most was how many people were finding practical and creative ways to move forward despite the pressures facing the sector.

Keeping Patients Front and Centre

One of the most memorable discussions of the day focused on rare disease innovation.
It served as an important reminder that behind every technology platform, funding round and development programme are patients and families searching for answers.

The challenge of diagnosis featured heavily in the conversation. Without a diagnosis, access to specialist expertise, support networks and potential treatment pathways can be significantly delayed, creating barriers that many families face for years.

The discussion also highlighted the growing importance of high-quality data. Better natural history data and stronger patient datasets are helping researchers understand diseases more effectively and design more meaningful drug development programmes.

Perhaps one of the most encouraging aspects of the conversation was the role patient communities are now playing in shaping innovation. More and more, patients are not simply participants in research, but active contributors to decisions around drug development pathways, clinical trial endpoints, and clinical priorities.

At the same time, familiar challenges remain. The need to balance scientific opportunity, patient need and commercial viability continues to be one of the most difficult questions facing the sector.
What the discussion reinforced was something many of us already know. Progress happens faster when data, expertise, and patient voices come together.

The Value of Bringing Different Perspectives Together
Looking back, one recurring theme throughout the day was that innovation rarely happens in isolation. Some of the most interesting conversations came from bringing together people with very different experiences and perspectives. Investors, entrepreneurs, patient advocates, researchers and industry leaders may approach problems from different angles, but there was a shared willingness to learn from one another.

In many ways, that has always been one of BioBeat's greatest strengths. The discussions also highlighted how interconnected innovation has become. Success increasingly depends on engaging not only with scientific and commercial partners, but also with healthcare providers, policymakers, regulators, and patient communities.

Trust featured prominently too. It may not be as tangible as funding, technology or data, but it remains one of the foundations on which successful partnerships are built. In a sector that depends on collaboration, trust continues to matter.

What This Means for Our Community
None of these observations were particularly surprising and perhaps that's the point.
They reflect many of the conversations already taking place across the One Nucleus community. Organisations are thinking carefully about how to finance innovation in a changing environment. They are working harder to ensure patient perspectives influence decision-making earlier. They are recognising that the challenges facing life sciences are simply too complex to tackle alone.

These priorities are unlikely to change anytime soon.

Looking Ahead
I came away from BioBeat26 encouraged. Not because the challenges facing our sector have somehow disappeared, but because of the quality of the conversations taking place around them. The life sciences community has never lacked ambition. What events like BioBeat remind us, is that progress depends on more than great science alone. It depends on people being willing to share ideas, challenge assumptions, and work together towards common goals.

The strongest impression I took away from the day was not from any single presentation. It came from the conversations over coffee, the unexpected introductions and the willingness of people to share experiences so openly that were initiated by the programme content.
BioBeat has always been about community as much as content, and that spirit was certainly evident throughout the day. As our sector continues to navigate uncertainty and opportunity in equal measure, those connections remain one of our greatest strengths.

My thanks again to our speakers, sponsors and attendees for their insights, openness, and contribution to the discussions. The quality of the conversations is what makes BioBeat such a valued part of the life sciences calendar, and I look forward to seeing how those conversations continue into **BioBeat27**.

If you would like to be involved in BioBeat 2027 please contact Philippa Clark pclark@onenucleus.com.

What One Year at One Nucleus Has Taught Me About the Power of Connectivity in Life Sciences



by Philippa Clark, Director of Business Development, One Nucleus

Looking back on my first year at One Nucleus, the most valuable lessons have emerged during the journeys between meetings. Travelling among White City, King's Cross, Canary Wharf and Cambridge has offered a distinctive view of the ecosystem. At St Pancras, I have often reflected on recent conversations and the people I was about to meet. Those moments revealed an ecosystem defined less by organisations or locations than by the relationships connecting them.

When I joined One Nucleus, I understood London's outstanding science, but not how deeply innovation depends on connections below the surface. London is often called fragmented because it has no single defining district or campus. Excellence is distributed across locations with different specialisms, institutions, and networks. Yet from within, London feels less fragmented than distributed, with strength rooted in its diversity of organisations, disciplines and perspectives.

Repeatedly, I have seen how close people already are without realising it. A founder's conversation leads to an investor elsewhere; a hub is only a few introductions from the academic expertise it needs; a company discovers a potential partner already in the ecosystem. Usually, the missing ingredient is visibility, not opportunity. London's advantage comes from the breadth of expertise it brings together, not concentration in one place. The challenge is helping people navigate a dense landscape of programmes, investors, hubs, and support networks.

The Visibility Challenge

The past year has challenged the assumption that ecosystems mainly lack resources. London has abundant scientific excellence, ambition, capital and specialist expertise. Often, the right people have simply not found one another. Founders describe the investor, adviser or collaborator they need, and I realise I met that person days earlier; investors likewise miss promising ventures elsewhere. Science, infrastructure, and finance are essential, but their value depends on access. This is why One Nucleus matters: building awareness, facilitating introductions and strengthening networks may be less visible than new facilities or programmes, but can be equally impactful.



Ecosystems Are Built by People

My strongest impression from the year is the people: founders launching ventures, academics exploring commercialisation, investors seeking breakthroughs and teams supporting innovation across London and Cambridge. One quality stands out—the willingness to help.

People offer introductions, share insights, and open doors for those they have never met. In a competitive, resource-constrained sector, that openness matters because ecosystems are built on trust. Behind every investment, partnership, spinout or breakthrough is a network willing to share expertise and create opportunities.

Looking Beyond Geographic Boundaries

Travelling between London and Cambridge has shown that innovation rarely follows geographic boundaries. Talent, investment and academic collaboration move across organisations, regions and disciplines. London's strength therefore depends on networks linking it to the wider life sciences landscape.

The London–Cambridge corridor gains power from the movement of people, ideas and opportunities between its constituent parts. Valuable conversations often begin in one place and continue in another; boundaries matter less than connections. For One Nucleus, local communities remain important, but major opportunities also arise when organisations reach beyond immediate networks through events, partnerships, introductions, and knowledge sharing.

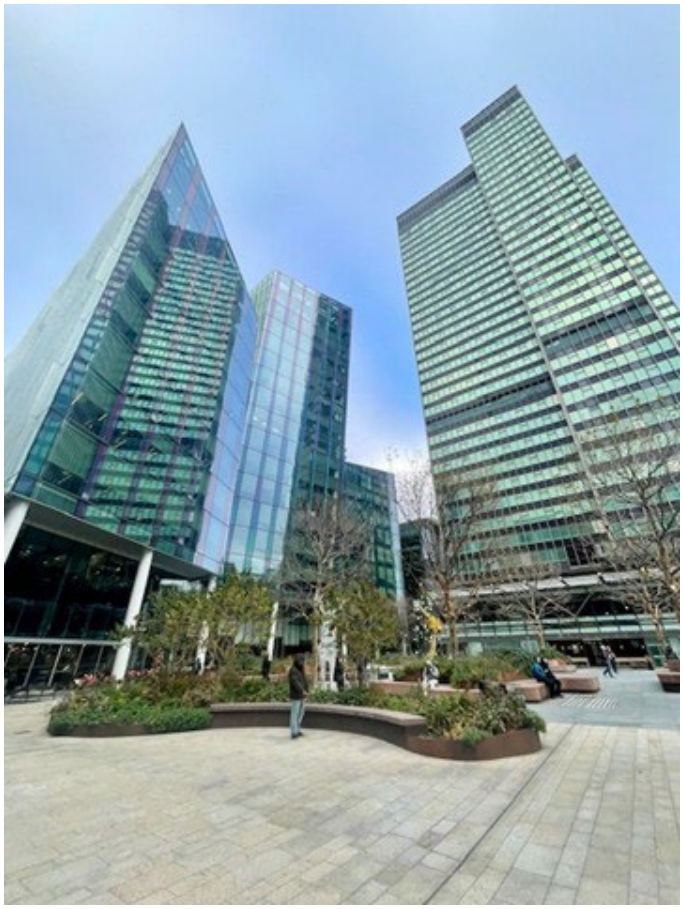
A Final Reflection

Looking back, the people stand out more than the places. The science is exceptional, entrepreneurial ambition is unmistakable, and investment and infrastructure are growing. Yet these assets create impact only through collaboration, shared ideas and relationships that accelerate innovation. Physical clusters, facilities and investment figures tell only part of the story.

The longer I have travelled among London's communities and across the London–Cambridge corridor, the more convinced I have become that our greatest advantage lies in the connections between them. Strengthening those links may be as important as attracting investment, expanding infrastructure, or supporting new companies. Opportunities already exist in abundance; the task is to make them visible, accessible and connected, so innovation moves faster from idea to impact.

London and Cambridge possess the science, talent and ambition to compete with leading life sciences regions. The question is whether we make it easy enough for those strengths to come together. After a year at One Nucleus, my lesson is simple: when expertise, opportunity and experience are visible to those who can benefit from them, good things happen.





Images Philippa Clark, One Nucleus

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What our clients say about our life sciences lawyers

> They are exceptionally strong on complex IP advice and commercial transactions.
>
> Chambers UK

> A laser-like focus on the desired outcome left me feeling like we got tremendous value.
>
> Legal 500



Rachel Bradley
Partner
+44 (0)1223 465465

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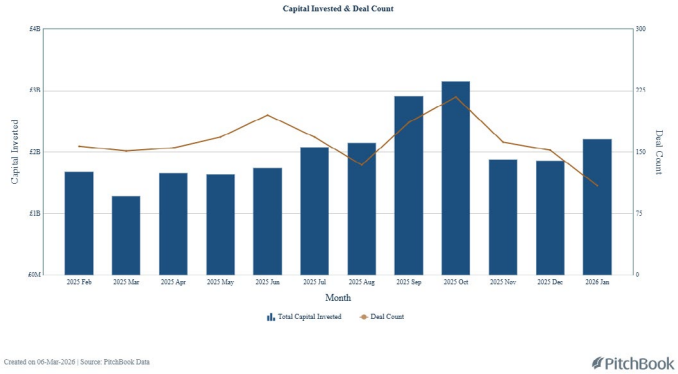
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One Nucleus Global Connectivity

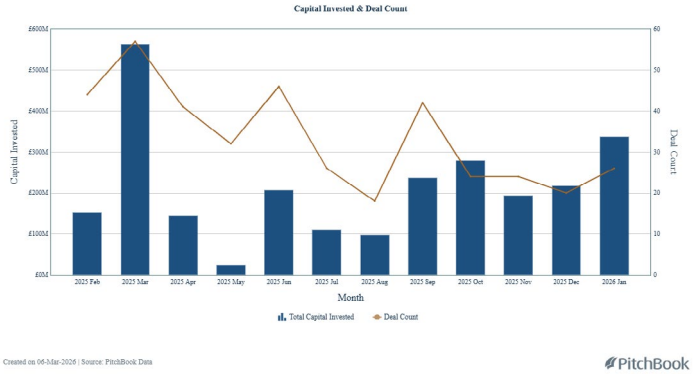
Unmet medical need is a global phenomenon that is driven by a plethora of interconnected factors, including lack of effective treatments, inadequate prevention and early diagnosis and variable access for patients based on geography. One Nucleus members are actively involved in addressing these barriers as they develop and deploy innovative technologies and medicines aimed at improving patient outcomes around the world. The effort to enable R&D, attract investment, and disseminate these advances to patients is also global, with the majority of policymakers, healthcare providers, and advocates accepting the well-documented links between health and economic prosperity. Moreover, numerous regions also aim to attract venture capital and industry investment into research, development and manufacturing of these innovative solutions due to the economic development benefits. 2025 and early 2026 have certainly seen major moves by Pharma to commit investment into both the US and China, perhaps at the expense of other geographies, as a noticeable trend.

Life Science Deal Flow Beyond Borders

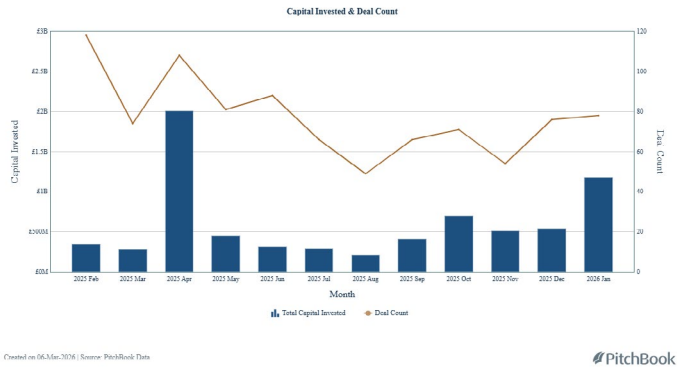
Competition for life sciences investment is a highly competitive arena, whether by companies seeking capital or inward investment teams seeking to fuel economic growth. As illustrated here for Jan. 2025 – Jan. 2026, the global life sciences venture capital deployment of £33.10Bn was dominated by the US, with Europe (including the UK) the second largest destination but now closely followed by China.



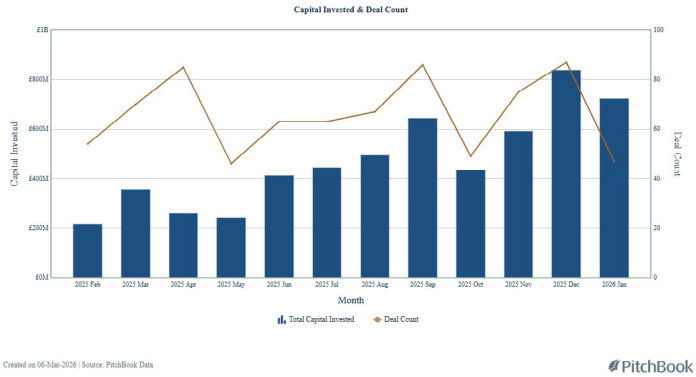
US



UK



EUROPE



CHINA

Delving into the sources, partners and investor syndicates involved in this global effort, however, exemplifies how the causes of ill health do not respect international borders, and neither do those innovating or investing in potential solutions. Winning against unmet need is a collaborative effort of the global life sciences industry. Different geographical ecosystems available to companies offer varying advantages dependent on the stage of development of a business or its products.

Both established and emerging businesses therefore must evaluate which is the best operating location based on need and not simply patriotism or loyalty.

Selecting the Best Ecosystem

Taking the above reality on board and accepting the underlying dynamic for our members is to innovate through collaboration, adaptability and resilience; supporting our members through connectivity and insight around international clusters is important. It cannot be ignored that securing their collaboration, investment and outsourcing deals is competitive, not least since every player has finite bandwidth to engage. A key driver for One Nucleus is to support our members in being competitive on the global stage by being the best version of themselves, and then beyond that, help them in grabbing the attention they need from others. These two aspects of support are different sides of the same connectivity coin.

Increasingly, even small-to-medium-sized companies have operations in multiple locations as they leverage what any ecosystem has to offer. This could be differentiation on the basis of factors such as research excellence, access to capital, available talent with the right experience, clinical trial infrastructure, or appropriate manufacturing capacity. Business incentives, regulations and commercialisation routes can all be influential also. Learning through feedback from our members with international presence or deal flow, along with those groups shaping and promoting various global clusters, we aim to enable our members to make informed decisions based on the best data and conversations.

One Nucleus Members Connect the Globe

The map below illustrates how global the One Nucleus membership base is. A truly global network creating intercontinental bio-bridges for anyone seeking peer-to-peer connectivity. Scan the QR code to delve deeper into the breakdown.



The One Nucleus international connectivity stretches far beyond our members through three main areas of activity:

International Biopartnering:

One Nucleus maintains great working relationships with collaborators who deliver global biopartnering and investment forums, securing discounted rates and/or increased profiles for members to ensure they are putting their global competitiveness in the life science shop window. These include via One Nucleus Partners, Informa Connect (formerly EBD Group) and Life Science Nation (RESI conferences) and collaborators such as BioCentury, NLS Days and BIO China.

Inward Missions:

A regular feature of the One Nucleus activities is the hosting of visiting economic development and trade missions from overseas. These can be in person or online, and recent months have included

engaging with delegations from Canada, China, Massachusetts, Japan, North Carolina and Utah. In addition, the sharing of key market intelligence is also key. An example is the regular webinars with Orrick on policy and engagement developments at the FDA.

International Initiatives:

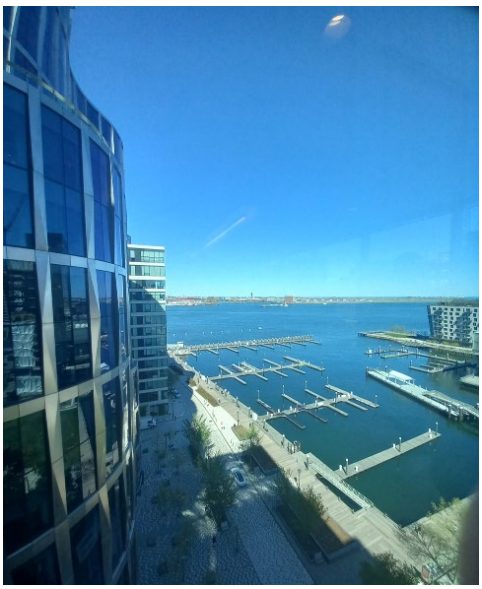
One of the higher-profile international activities One Nucleus undertakes is the annual Boston Bootcamp. A competition funded by One Nucleus, where the winners receive an expenses-paid trip to Boston to engage with local experts to gain understanding of how to do business in Massachusetts and access US investors and the business incentives available.

Looking ahead to the 2027 programme, the plan is to align the Boston visit with Boston Biotech Week in September, creating opportunities for participants, supporters and sponsors to connect with the wider life sciences ecosystem and events taking place across the city.

In addition, satellite events such as breakfast seminars and networking receptions are delivered around the annual BIO International Convention to bring our members together with international peers. Participation at RESI JPM in January, hosting an Ontario delegation at Genesis 2025 and the inaugural One Nucleus – Flanders targeted partnering event, hosted at the impressive VIB research centre, are ongoing initiatives invested in to support our members in accessing dealmaking opportunity forums.

For more information on the One Nucleus international activities, please email info@onenucleus.com





Boston images: Alicia Gailliez, One Nucleus



Belgium Image:
Philippa Clark, One Nucleus

Learning & Development Overview

Empower Your Team Through Tailored Training



One Nucleus knows that one size does not fit all when it comes to professional development. We offer flexible, high-quality training courses designed to meet your company's needs. Whether you are a small start-up or an established company, we have options that work for you.

Working with industry experts to deliver practical, industry-focused courses ranging from technical expertise to essential business (soft') skills. A popular example from our range of technical courses is our IOSH Approved Biological Safety Management and Practice course, focused on biological risk management and risk assessments. On the essential skills side, we have a range of options from presentation skills training to practical introductions to managing projects, all tailored specifically for those working in the life sciences ecosystem.

View our Upcoming Training Courses or Scan the QR Code for More Information and to Register.

Delivery Formats to Suit Your Needs

From in-house delivery, exclusive to one company, to open courses where companies can send individual employees; in-person and online options are available.

"The IOSH 2-day course has been incredibly efficient in helping me boost my productivity! The course was informative and engaging, and I particularly appreciated the clear communication of relevant information from the trainer. The exercises were a fantastic way to involve everyone and made the learning process enjoyable and easy to follow. Thank you for a great experience!"

In-House Courses

In-house training offers a practical, flexible way to develop your people. Give your team training that feels relevant, practical and made for them—delivered at your premises or online; we can tailor the experience to your company's specific needs.

Why choose in-house training?

- **Made for your team**: Shaped around your policies and everyday challenges.
- **Easy to arrange**: Choose on-site or online delivery.
- **More time together**: Reduce travel, costs, and disruption.
- **Useful from day one**: Put new learning into practice straight away.
- **Room to grow**: Start with one course or build a longer-term programme.

Let's find the right fit - We'd love to help you create a programme that works for your team. Get in touch with our training team to start the conversation via training@onenucleus.com.

New Learning Opportunities for 2026

Alongside our established training portfolio, we continue to develop and introduce new seminars and courses that reflect the evolving needs of the life sciences sector. Recent additions have explored topics including business lead generation, cashflow forecasting, R&D outsourcing and strategic collaborations with China, supporting organisations from early-stage spin-outs through to growing biotech companies. The response to these sessions has been extremely positive, with excellent feedback highlighting both the relevance of the topics and the practical value of the discussions.

Building on this momentum, we are already planning further seminars to address emerging opportunities and challenges facing the sector.

Our portfolio is shaped by ongoing conversations with members and the wider life sciences community, ensuring it remains relevant, practical and aligned with real-world priorities. We are always keen to hear from our network, and welcome suggestions for future seminar topics, speakers or areas where additional learning and discussion would be valuable.

One Nucleus Creates a New Membership Category for Those Who Find Themselves Between Life Science Jobs

Recognising the challenges many professionals face during periods between roles, we have also introduced a new Job Seeker membership category to help individuals remain connected to the life sciences community while planning their next career move. Designed for those actively seeking employment within the sector, the membership provides affordable access to networking opportunities, discounted events, upskilling seminars and our mentoring scheme, ensuring members can continue to develop their knowledge, expand their professional network and stay engaged with the latest industry developments until they secure their next opportunity. Anyone who would like to find out more, or discuss whether the scheme is right for them, please contact training@onenucleus.com.

Supporting Career Growth Through Mentoring

The One Nucleus Mentoring Initiative connects life science professionals with mentors or mentees to share expertise and support career growth. Whether you're looking for guidance or keen to share your experience, get in touch with One Nucleus and we'll help connect you with someone from our network.

We are here to help you find a mentor or mentee - it's our chance to play our full role in connecting the expertise and know-how of our network to those that need it and thereby collectively enhancing the success of the cluster.

What Our Recent Mentees Are Saying

"My mentor has been fantastic - their shared background transitioning from medicine into biostatistics means they truly understand my journey. They've provided practical, reassuring support with interview prep and PhD applications, and it's been genuinely refreshing to receive such relevant, experience-informed guidance. Overall, a really positive and valuable experience, I'm very grateful for the opportunity."

"Following an unexpected career transition from a laboratory-based role, I developed a strong interest in Regulatory Affairs and began exploring opportunities within the field. Through the One Nucleus mentoring initiative, I was matched with a mentor who provided valuable guidance and insight through a series of supportive discussions. The experience has been incredibly beneficial in helping build confidence, expand understanding of the sector, and support progression towards interviews for regulatory-focused roles."

A Network of Training Providers

We are delighted to be working with a group of member companies offering discounted learning and development services to One Nucleus members.

- Health & Safety Works
- Wellcome Sanger Institute
- My Green Lab
- Perla Development

Save with One Nucleus

One Nucleus offers discounted rates for One Nucleus gold and silver members and discounted rates to members of the BIA, Bionow, SLAS and CCRA.

In addition, we maintain a directory (sat nav) of external providers within the sector offering training outside of our own portfolio.

Contact training@onenucleus.com for more information.

UP TO 30% OFF Training Courses for One Nucleus Members

Courses Include



- IOSH Approved Biological Safety Management and Practice (2 day course)
- Introduction to Drug Discovery: From Idea to Clinical Candidate
- Presentation and Communication Skills for Life Science Professionals
- The Safe Use and Management of Laboratory Gases
- Introduction to Managing Life Science Projects
- Introduction to Drug Development - From Candidate Selection to Patients in Healthcare
- and more...

Other Learning Opportunities

- Upskilling Seminars and Webinars
- Lunch & Learn Sessions
- Special Interest Groups: L&D, HR, Marketing
- Student & Post Doc Membership

one nucleus™

For more information, email training@onenucleus.com

Facilities Work Performed

Facilities Services

Chief Technical Specialist, Richard Dickinson, has over 30 years' experience in life sciences Facilities Management leading on design, fit-out and operational projects. Experience in facilities management followed over a decade in laboratory research, giving Richard clear knowledge of what scientists need and how to deliver it.

Richard has been with One Nucleus for over 18 years and has worked with over 40 companies on their growth and sometimes exiting journeys in this time. Demonstrating Richard's value in the eyes of clients is the high level of repeat business and peer-to-peer referrals for his services which include:

- Identifying available lab space to meet the client needs; Richard often hears about space being available before the agents, especially sub-lets, due to his extensive client network.
- Design and project management of lab and office fit-out projects.
- Relocation projects.
- Dilapidations.
- On site Facilities Management.

2026 clients have included Babraham Research Campus, Broken String Biosciences, Constructive Bio, Domainex, ExpressionEdits, Forth Therapeutics, Gen Two, Healx, Howard Group, Insmed Innovation UK, Pixl Bio, Storm Therapeutics and Superdielectrics Group Plc.

Case Studies can be viewed here.



Savings for Members



All One Nucleus Gold Members have access to the full Purchasing Scheme which gives them discounts on goods and services purchased from our suppliers, listed below.

Gold Members that purchase from Fisher Scientific also receive a growth rebate on their annual spending at the end of the year. The overall savings made easily cover the cost of a Gold Membership. **Silver Members can access selected agreements as shown in the table below.**

Purchasing Scheme



001* – providing utility savings and green energy contracts
Air Liquide – providing laboratory gases
BOC – providing dry ice services
Complete* – providing stationery, office goods, IT consumables and office furniture
Fisher Scientific – providing laboratory consumables, laboratory chemicals, low value apparatus and Life Science Products
Grabbit and Run* – providing courier services
Grundon - integrated waste management and environmental services
STARLAB – providing pipette maintenance and calibration services

*discounts are available to Silver members.

Marketplace

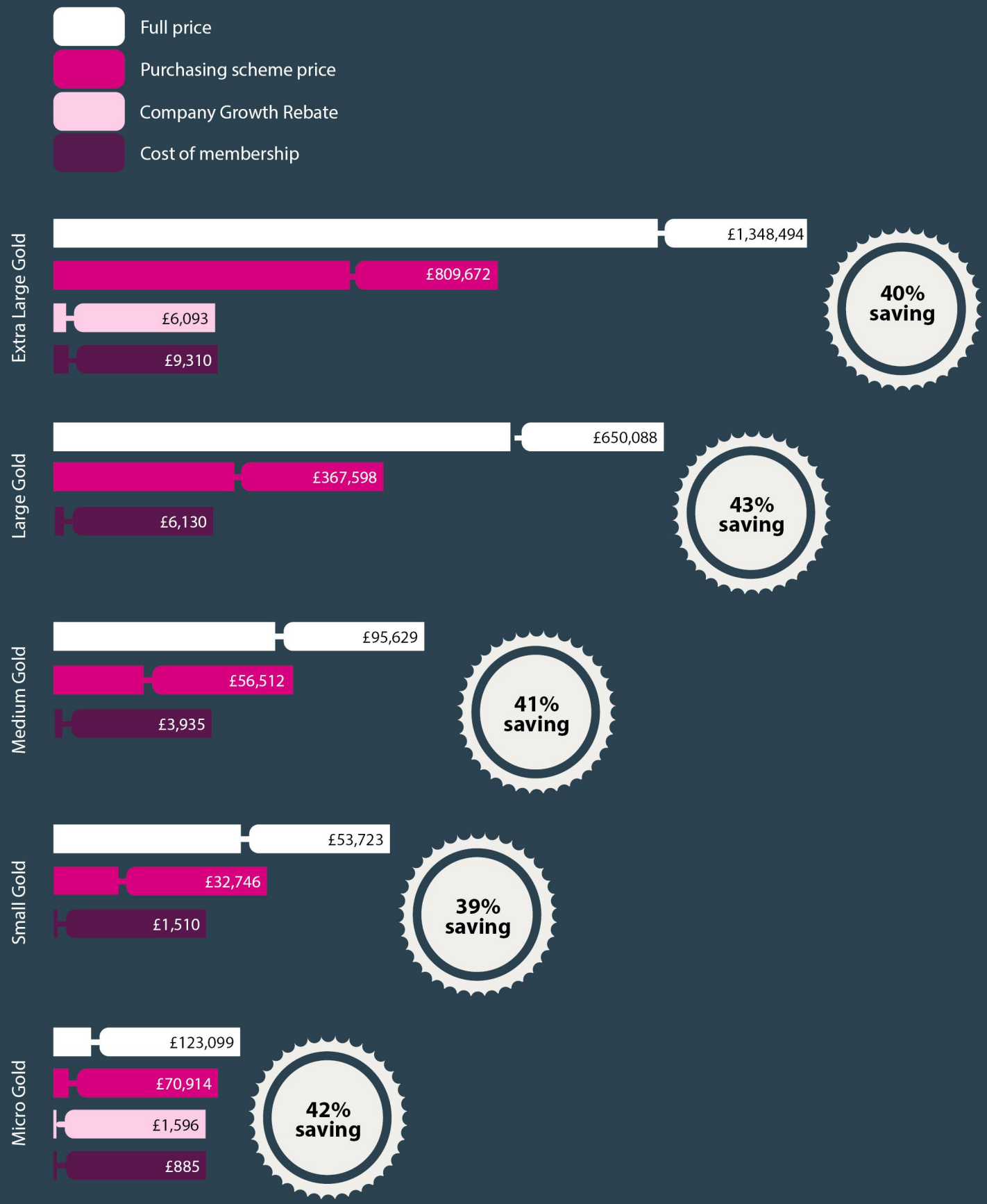
The One Nucleus Marketplace are discounts available to **all** members from other service providers and include:

Health & Safety Works Health and Safety consultancy		**Mathys & Squire** Patent & Trade mark attorneys
Haier Biomedical Lab equipment		**KISS Communications** Marketing services
Harrow Green Lab & office relocation, biobanking, sample storage and disaster recovery		**LimestoneGrey** Tax advisors
Medicilion Drug-discovery and preclinical R&D services		**My Green Lab** Sustainability training
SciSure Laboratory Data Solutions and Services		**Perla Development** Coaching and training services
Cambridge University CT scanner facility CT scanning services		**WASTELESS BIO** Recycling life science products
PHARMAGENE Discovery Services Human Tissue Research Solutions		**o2h** Integrated drug discovery services
Lab Thread Integrated Digital Laboratory Solutions		

See examples of the savings made by a selection of member companies by size in 2025 overleaf.
Contact Richard Dickinson at richard@onenucleus.com for further information

One Nucleus Purchasing Scheme - Examples of Members' Savings (1/1/25 - 31/12/25)

The chart below provides actual examples of the savings made by a selection of member companies by size, ranging from extra large to micro, using our Purchasing Scheme.
For some, the Company Growth Rebate alone **covered the cost** of membership.



One Nucleus Membership Benefits

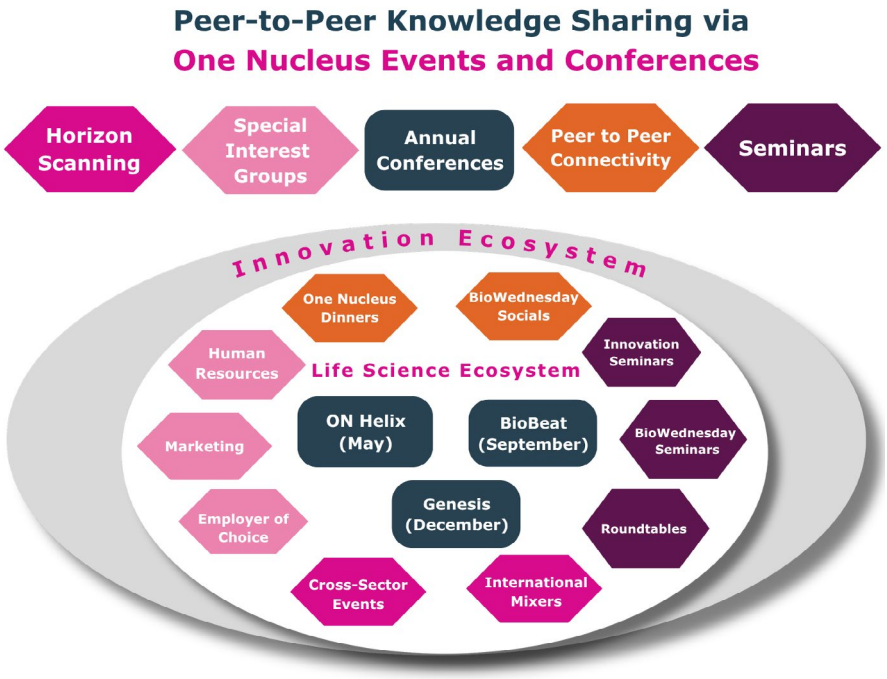
Website & Social	Non-Member	Silver Member	Gold Member
Listed in Online Membership Directory	✗	✓	✓
Post News to Website & Social Media	£75+VAT	✓	✓
Advertise Jobs on Website	£75+VAT	✓	✓
Advertise Events on Website	£75+VAT	✓	✓
e-Newsletter Sponsorship - banner advert	£800+VAT	£500+VAT	£500+VAT
Advertise in One Nucleus Highlights (starting prices)	£750+VAT	£500+VAT	£500+VAT
Events			
ON Helix Delegate	£545+VAT	£435+VAT	£325+VAT
Genesis Delegate	£545+VAT	£435+VAT	£325+VAT
BioWednesdays	£75+VAT	✓	✓
Innovation Seminars	Invitation Only	✓	✓
Services			
Training	✓	15% Discount	30% Discount
Facilities Management Consultancy Day Rate*	£1,240+VAT	£1,055+VAT	£875+VAT
Preferred Supplier Discounts	✗	✓**	✓
Access M2M Marketplace Discounts	✗	✓	✓
Access to Themed Interest Groups	£75+VAT	£45+VAT	✓
Employer of Choice Sessions	Invitation Only	✓	✓
Access to On-Demand Library	Restricted	✓	✓

*All prices are exclusive of expenses.
**Access to some but not all.
Prices correct at time of print.

Peer-to-Peer Knowledge Sharing via One Nucleus Events and Conferences

One Nucleus creates an environment where members can network, share knowledge, build connections, and collaborate. This is pivotal to driving collective success within the sector.

The diagram below illustrates the main ways that One Nucleus facilitates these interactions through our events and conferences, helping our members to create the relationships that generate deal-flow across the life science ecosystem.



Horizon Scanning
Facilitating connections between our network and complementary networks across related technology fields and different geographies is an effective way to help members build valuable new relationships. One Nucleus maintains strong collaborative relationships with a wide range of organisations across the UK and internationally, enabling this kind of connectivity and creating opportunities for collaboration across the wider life science ecosystem.

Themed Interest Groups
An opportunity for peers in a similar role to connect, share knowledge and learn from each other, including HR and Marketing related topics.

Annual Conferences
The focal points of the One Nucleus events calendar including:
ON Helix – Focusing on translational research and the tools, technologies and ecosystems that enable it.
Genesis - Our largest annual event focussing on investment, technology development and deal trends in the sector.
BioBeat – Brings together founders, investors, researchers and industry leaders to exchange insights, build connections and explore the challenges and opportunities shaping the UK biotech sector, with a particular focus on female leadership.

Peer-to-Peer Connectivity
An opportunity to network and connect with the One Nucleus life science community through an informal mixer or a One Nucleus Working Dinner, bringing together senior executives from across the cluster for engaging discussions over dinner.

Specialist insurance for the **life science**, **biotechnology** and **healthcare** industries



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- Directors and Officers Insurance
- Commercial Contents/Stock/ Property Insurance
- Laboratory Insurance
- Clinical Data
- Clinical Trials

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Seminars
Includes half day, full day and breakfast sessions on key technical and business topics. These sessions include:

BioWednesdays – Broad, peer-to-peer discussions and debate, with dedicated networking time.
Innovation Seminars – Designed to provide practical insights and opportunities for upskilling.
Roundtables – Closed, invitation-only meetings providing an environment for focused discussion and peer exchange.

Our events attract a mix of members and non-members, highlighting the opportunity for attendees to engage with a broad and inclusive range of stakeholders. Members benefit from free and discounted rates, making membership the most cost-effective way to build strong relationships and enhance brand visibility within our community.

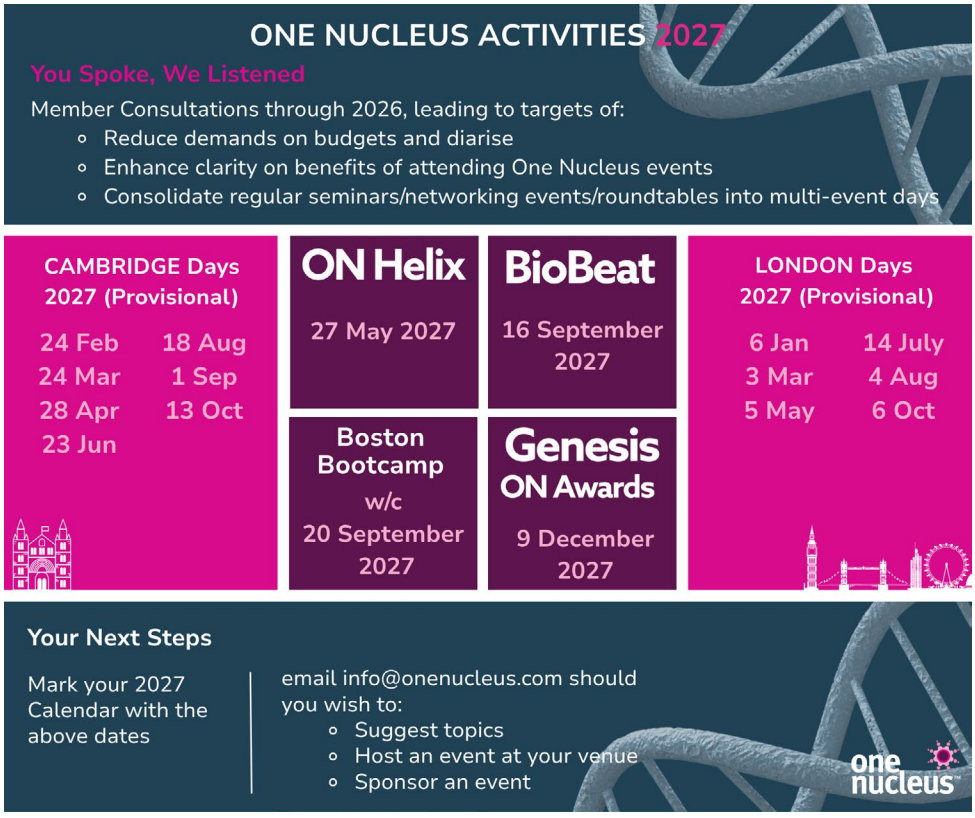
For organisations looking to increase their profile further, our sponsorship opportunities offer additional ways to raise brand awareness, demonstrate expertise and engage directly our audience.

Our 2027 Event Programme

There are always lessons to learn, and for One Nucleus, that provides an opportunity to adapt our activities and delivery to align with current and future needs. Diary congestion and budgets are two key barriers almost every company we work with raise as challenges. To assist in these aspects, One Nucleus is implementing a number of changes in our event portfolio going forward, which include:

- Bringing the ON Annual Awards into Genesis.
- Focus on delivering thematic seminars to maximise relevant learning and connectivity.
- Targeting consolidated days of events in either London or Cambridge to ease diary congestion, travel costs and maximise the serendipitous opportunity.
- Re-scheduling key initiatives such as Boston Bootcamp, BioBeat and ON Helix to enable greater leveraging of these larger activities by their participants.

Explore the One Nucleus 2027 calendar below.



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LIFE SCIENCE NATION
Connecting Products, Services & Capital

COMMERCIALIZATION ENGINE

BRIDGING THE EARLY-STAGE COMMERCIALIZATION GAP

Across the four core life science sectors of Drugs, Devices, Diagnostics, and Digital Health (the 4Ds), approximately 9 out of 10 early-stage assets fail to become viable, legible, and investable companies. Promising science is frequently stranded in regional silos where risk is addressed out of sequence. Life Science Nation (LSN) replaces fragmented efforts with a disciplined, market-facing commercialization operating system.

$1.29B	$6.4B	15,000+	14+ Years
RAISED DIRECTLY	TOTAL IMPACT	STARTUPS TRACKED	MARKET LEADERSHIP

LIFE SCIENCE NATION
Connecting Products, Services & Capital
GLOBAL SOURCING & DATABASES

RESI REDEFINING EARLY STAGE INVESTMENTS
PARTNERING MARKETPLACE

LSN LABS
ASSESSMENT & ROADSHOWS

THE SOURCING & MATCHMAKING SUPERSTRUCTURE

LSN Investor Database (Buy-Side)

- **Directly Interviewed Profiles:** Curated mandates spanning 10 distinct capital and partnering categories.
- **Comprehensive Coverage:** Venture Capital, Corporate VC, Large Pharma scouts, Angel Groups, Family Offices, and Global Foundations.
- **Precise Mandate Alignment:** Sourced by sector, stage, modality, sub-indication, and transaction preference.

LSN Business Development Database (Sell-Side)

- **Cross-Domain Pipeline:** 15,000+ early-stage companies and 64,000+ life science assets spanning the 4Ds, AI, and R&D Tools.
- **Complete Lifecycle Visibility:** From academic tech-transfer spinouts and non-dilutive grant recipients to Series Seed through E.
- **High-Fidelity Intelligence:** Tracked pipeline milestones, financing histories, and executive management contacts.

THE ANCHOR NODE™ COMMERCIALIZATION ENGINE

Most research ecosystems discover great science but lack a unified mechanism to compare assets or assess financeability. The Anchor Node aggregates local universities, hospitals, tech transfer offices, and incubators into a **single visible funnel**. By ranking assets against a common evidence standard, it is engineered to **triple regional commercialization success rates from 1-in-10 to 3 or more out of 10**.

CONTACT US

✉ Email: **resi@lifesciencenation.com**
☎ Phone: **+1 (617) 600-0668**

Our Location
One Broadway, 14th Floor
Cambridge, MA 02142, USA

THE END-TO-END OPERATING STACK

STEP 01

LSN Labs Assessment

Agentic assessment engine. Quantifies evidence, identifies unproven risks, and establishes objective milestones to make assets financeable.

STEP 02

Founder Education

Curricula based on *Dissecting Return and Risk* and *The Fundraising Manifesto*. Prepares CEOs for 9–18 month international roadshows.

STEP 03

RESI Conferences

Global partnering marketplace held 5 times annually. Pre-screened 1-on-1 meetings, investor panels, and the Innovator's Pitch Challenge.

STEP 04

BD Assist Execution

Turnkey outreach engine. Delivers Global Target Lists (600–800 investors), Salesforce CRM setup, white-glove booking, and canvassing.

RESI REDEFINING EARLY STAGE INVESTMENTS

PARTNERING MARKETPLACE

Held in concert with key global gatherings (San Francisco JPM Week, Bio Europe, BIO International, and Boston):

- **Curated 1-to-1 Matching:** Connects Seed through Series B startups with active investors and pharma licensing scouts.
- **Innovator's Pitch Challenge (IPC):** Dedicated pitch slots and real-time interactive Q&A feedback from panels of coordinated investors.
- **Exhibition Hall:** Dedicated exhibit spaces for early-stage innovators, CROs, CMOs, and tech hubs to build cross-border partnerships.

LSN LABS

ASSESSMENT & BD ASSIST

Harmonizing science, risk legibility, and continuous campaign execution:

- **LSN Labs Assessment Engine:** Transforms company data into a 6–10 page investor-readable roadmap answering 5 governing risk questions.
- **Collateral & Narrative Overhaul:** Refines tagline, elevator pitch, executive summary, tear sheet, and pitch deck for institutional investors.
- **BD Assist Infrastructure:** Turnkey Salesforce CRM (Pro Suite) setup, GTL mapping (600–800 targets), phone/email canvassing, and meeting debriefs.

WHO WE SERVE ACROSS THE ECOSYSTEM

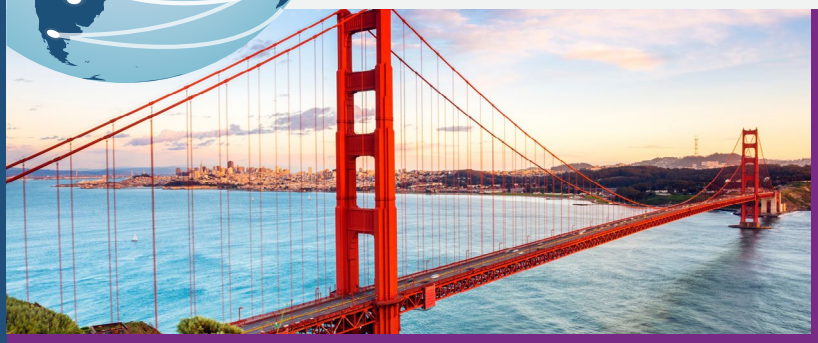
STAKEHOLDER	STRATEGIC DELIVERY & CORE VALUE
Scientist-Entrepreneurs & CEOs	Translates science into investable signal, targets mandate-matched partners, and sustains active fundraising campaigns.
Investors & Strategic Scouts	Pre-screened, de-risked 4D pipelines; comprehensive insight into technologies, milestones, and direct management contacts.
Regional Hubs & Universities	Anchor Node commercialization architecture, aggregating regional discoveries into one visible, measurable funnel.
CROs, CMOs & Service Providers	Direct exhibition and sponsorship access to funded and scaling startups requiring regulatory, lab, banking, and legal counsel.

CONTACT US

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RESI 2027 CONFERENCE SERIES



RESI JPM 2027

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APR 15-16, 19-20: VIRTUAL PARTNERING



RESI PHILADELPHIA 2027

JUN 7: CONVENE 30 SOUTH 17TH STREET
JUN 8-9. 14-15: VIRTUAL PARTNERING



RESI BOSTON 2027

SEPT 22: THE WESTIN COPLEY PLACE
SEPT 23-24, 27-28: VIRTUAL PARTNERING

For more information about our future events,

visit our website RESIConference.com or contact us at RESI@lifesciencenation.com.

Entrepreneurs-in-Residence: Facilitating the journey from academic science to start-up company

Experienced EIRs give academic founders company-building capability, while a venture fund adds capital, syndication experience and practical support from formation through early growth.

Spin-out companies based on academic research rarely fail for lack of originality. The harder transition is turning a discovery into a fundable company with the challenges of defining the first product, understanding the market, building the team, shaping the development plan and persuading investors that an idea can become a viable business. For many academic founders this is unfamiliar territory. An Entrepreneur-in-Residence (EIR) can bridge scientific excellence and commercial execution, bringing hands-on company-building judgement early enough to influence venture formation.

Cambridge Innovation Capital has experience of investing in over 45 early-stage companies with over half having their origins within academia. Our experience has been that companies are more likely to make the bridge from academia to the commercial world when there is an experienced co-founder alongside the scientific co-founders. Based on this experience, we established our EIR programme across life sciences and deep tech. Launched in partnership with the University of Cambridge, it matches experienced life sciences and deep tech executives with academics with high-potential intellectual property, aiming to increase the number and quality of spinouts and accelerate commercialisation. CIC's position has the added benefit that EIRs and founders operate within a venture fund with extensive sector expertise, financing capacity and experience of building and supporting early-stage companies.

In both life sciences and deep tech, the path from ground-breaking academic research to investment-ready company is capital-intensive, technically complex, and dependent on experienced leadership. An EIR can help academic founders translate biology into a commercial hypothesis, set development milestones, recruit management and advisers, and shape the financing story. The venture fund can then test the opportunity, commit early capital and attract co-investors through proof-of-concept.

Dr Damian Crowther was one of our early EIR. Damian worked in clinical neurology, academic neuroscience and drug discovery (as Head of Early Drug Discovery at AstraZeneca Neuroscience) before joining CIC as an EIR. In a joint EIR appointment between CIC and the Dementia Discovery Fund (DDF), he collaborated with Dr Leo James (Laboratory of Molecular Biology) and Prof Will McEwan (University of Cambridge) to co-found TRIMTECH Therapeutics, a spin-out company developing targeted protein degradation approaches for neurodegenerative diseases. In March 2025, the company announced a £25 million seed financing co-led by CIC and DDF with some blue chip life science investors.

Dr Mihriban Tuna was formerly CSO of Adaptate Biotherapeutics and an experienced biotech executive before she joined CIC as an EIR and became CEO of Immutrin. The company was established by CIC with academic founders Professor Sir Mark Pepys, Nobel laureate Sir Gregory Winter and Professor Daniel Christ to develop antibody therapy designed to remove amyloid deposits in ATTR amyloidosis. In March 2026, Immutrin raised a £65 million Series A financing to progress the idea from research into patients.

We are delighted to have recently brought on two new EIRs. Dr Rodrigo Santos who brings deep expertise in cell biology and the development and application of innovative cell technologies across biotech and pharma and Dr Laurent Jespers who has 25 years of experience in discovery and early-stage clinical development of multiple therapeutic modalities and diseases area. Rodrigo and Laurent join the fabulous cohort of deep tech EIRs including Ignas Budvytis, Ilana Wisby, James Chapman, Philip Winter and Sally Epstein.

The EIR programme gives academic founders in Cambridge and beyond an experienced partner who can help convert academic research into a company-building plan. The EIR gains access to exceptional science and the opportunity to leverage their experience to build something exciting. CIC gains a proactive route to company creation while helping Cambridge research attract leadership and capital. Our life sciences and deep tech EIRs show the model's capacity to bring together experienced operators, academic founders and committed venture capital to move important science from academia into companies capable of raising significant capital and pursuing global impact.

https://www.cic.vc/

CAMBRIDGE INNOVATION CAPITAL

Are We at a Turning Point in Paediatric Oncology?

Cancer is the leading disease-related cause of death in childhood, yet only 7 drugs have been approved exclusively for young patients by the EMA and the FDA between 2007 and 2022 (against +60 adult oncology approvals from the FDA in 2024 alone). Consequently, most children receive decades-old therapy designed for adults, which has improved survival but at a cost: by age 45, up to 80% of survivors will face serious complications: chronic illness, neurocognitive impairment, or secondary cancers.

Roughly half of paediatric tumours carry druggable targets, yet only a few ever attract the investment to create drugs.

A Path Beyond Market Failure

Smaller patient populations mean discoveries often can't attract the capital needed to cross the gap between research and investable drug development. Classical discounted cash flow analysis shows paediatric oncology generates a negative risk-adjusted net present value, especially for the complex, personalised therapies that have transformed adult cancer care. A traditional commercial model won't deliver therapies to children.

However, flipping the following levers can improve the odds: philanthropic/blended capital fund the riskiest early stages, commercial investors follow once uncertainty eases; developers pursue adult cancers as secondary applications for parallel income; and active portfolio management concentrates resources on the most promising assets, rather than spreading thin.

Emerging Signs of Promise Amongst Headwinds

Luckily, momentum is building as evidenced by movement in the first half of this year on three fronts: coordination, capital, and market validation.

Coordination: In March, the paediatric oncology drug development community convened in New York to tackle compounds with existing adult safety data shelved for commercial, not scientific reasons. Participants agreed to build a turnkey pathway reviving these deprioritised assets for children.

Capital: Also in March, C-Further, a venture founded by three of the UK's leading not-for-profit organisations, launched a pipeline dedicated to children's cancer, moving beyond repurposing toward targeted, de novo discovery, sourcing science from academia and industry, then co-developing, accelerating, and de-risking it towards commercial viability.

Validation: And in April, Servier completed a $2.5bn acquisition of Day One, securing OJEMDA, an approved therapy for paediatric low-grade glioma, a common childhood brain tumour, sending a clear signal that paediatric assets can command genuine commercial premiums once significantly de-risked.

An Opportunity to Stand Out

Although well-resourced players routinely fail to get innovation to patients, for some, childhood cancer may be a genuinely differentiated strategy.

First, paediatric tumours carry a lower mutational burden, often driven by a single dominant lesion, simplifying target identification. These targets, often fusion transcription factors or chromatin regulators, have historically been difficult to drug, until a decade of advances in modality/platform made them increasingly tractable.

Although the target population is small, and recruitment can be rate-limiting, cohorts are often concentrated at a few hubs with the right expertise, infrastructure and networks, supporting the initiation of high-quality trials.

Layered on top is a meaningful incentive stack: extended exclusivity, tax credits, fee waivers, Priority Review Vouchers that are convertible into liquidity, and specialist pharma willing to pay top dollar for validated assets. Even if the regulatory incentives remain in flux, the economics are becoming increasingly interesting.

While these benefits alone might not outweigh the hurdles for all, biotechs holding a deprioritised adult asset with paediatric relevance, platform companies validating a technology's versatility and companies seeking a fast, orphan-eligible proof point might find their interest piqued. For each of these groups, engines such as C-Further now offer a credible route into development, alongside a receptive regulatory environment.

Momentum Is Not a System...Yet

Solving this sustainably needs more than smart funding models or company-level strategies. At a sector level, robust frameworks are needed to stop promising assets being shelved when priorities shift, so discoveries already made still reach patients. The same narrow mutational burden that simplifies target identification also means a drug that fails in an adult trial may still work in children: the logic behind rescuing stalled assets.

Policy is also catching up. The US RACE for Children Act shows regulation can accelerate paediatric development, and the recent Give Kids a Chance Act reauthorises Priority Review Vouchers at a value of up to $200m. The shift isn't confined to the States: Australia has launched a national childhood, adolescent and young adult cancer roadmap and the UK has enacted its own Rare Cancers Act, with further regulatory reform underway.

None of this makes a complete system yet, but the direction is unmistakable. As the industry starts to view paediatric oncology as a market worth building, real change is possible. Dismissed as a niche for too long, with the right capital, partnerships and policy, children and young people's cancers can be both scientifically viable and economically sustainable.

If you want to explore childhood cancer as a viable therapeutic opportunity, reach out: info@c-further.org

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When Precision Medicine Loses Its Patients in Translation

In November 2017, 25-year-old Mallory Smith was running out of options. She had cystic fibrosis and a drug-resistant *Burkholderia cenocepacia* infection that persisted despite years of treatment and a lung transplant. When antibiotics failed, an international effort began to find bacteriophages that could eliminate her bacterial infection. The personalized bacteriophage therapy arrived. Smith received her first dose on 14 November. She died the next day.

Smith's autopsy revealed that the bacteriophages had reached their bacterial targets and had begun working as intended. (1) No one can know whether earlier treatment would have changed the outcome. Still, her story captures a larger problem in precision medicine: identifying the right treatment is not the same as getting it to patients in time.

Precision medicine excels at finding biological differences that matter. We can sequence tumors, match mutations to treatments, and even re-engineer patients' own immune cells. But knowing what might work is only half the job. A therapy still must make its way from scientific possibility to clinical reality, and that path can determine whether patients ever benefit from it.

CAR-T shows how important that path can be. Conventional workflows can take roughly three to six weeks from vein to vein, and an estimated 30% of prescribed therapies are never infused because patients deteriorate while the product is being made. (2) The encouraging part is that the field has refused to treat that delay as unavoidable. Rapid manufacturing is cutting the wait from weeks to days, while point-of-care and in-vivo approaches may shorten it further. Quality control can still add time, but the treatment delay itself is now being seen as its own problem to solve.

That is what I mean by translational precision. Improving the therapy matters, but so does improving the route it takes to reach patients.

And time is only one part of that route. Geography can change it just as dramatically. The WHO found that HER2 testing and trastuzumab were included in the largest public-sector health benefit packages of only 34% of responding countries in the African Region, compared with 96% of high-income countries. (3) Thus, the biological target may be the same, but the ability to identify it and act on it is certainly not.

The uneven access is not limited to lower-income settings. Even among wealthier countries, a therapy can receive authorization and still encounter very different routes to reimbursement and access. In one 20-country study, six reimbursed no advanced therapy medicinal products at all while others reimbursed one or more therapies. (4) Cross a border, and the science has not changed, but the path to the patients has.

Sometimes the gap appears even earlier. In pharmacogenomics, African populations remain underrepresented in global genomic studies while many health systems face limited sequencing, laboratory, and implementation capacity. (5) If the evidence used to make medicine precise is not globally representative, then precision medicine risks reproducing the inequities it is meant to overcome.

My work on antimicrobial resistance and bacteriophage therapy first made me notice this problem. Once I started looking outside infectious disease, I kept finding the same disconnect. Precision medicine could be scientifically precise while the path to patients was anything but.

The World Health Assembly made a similar point in May 2026, linking progress in precision medicine to fair access and the health systems needed to support it. (6) That matters because we often talk about translation as though it begins after the science is finished. In reality, manufacturing, diagnostics, regulation, reimbursement and logistics help determine whether the science ever becomes care.

A treatment cannot benefit patients who never receive it. Biological precision therefore needs translational precision too. We must be able to identify the right intervention, then manufacture, approve, finance, and deliver it while it can still change the patients' outcomes.

Maybe we also need to rethink what counts as readiness. We measure efficacy, safety, and biomarkers, but how long does a treatment take to reach patients? Can they access it at all? Where does the process slow down? Which delays can we prevent? How much does geography change the answer?

These are the questions I want to keep exploring, and I am keen to collaborate with others working on them from different parts of the translational pathway. If this overlaps with your work in therapeutics, diagnostics, manufacturing, access, or policy, please reach out. I would welcome the chance to compare perspectives, find shared questions, and see what we might build together.

Precision medicine has spent years asking how to find the right treatment for the right patients. Perhaps the next frontier is making sure it reaches them in time because precision medicine is only as precise as its path to the patients.

Amanda Robinson PhD, MBA
https://www.linkedin.com/in/amandarobinson-mls/



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Designing for Scale: Building CMC Into ADC and AOC Development from the Start



Antibody-drug conjugates (ADCs) and antibody-oligonucleotide conjugates (AOCs) are advancing rapidly beyond oncology into rare diseases and neuromuscular disorders. Reaching patients depends on bridging early innovation with scalable manufacturing, analytical control, and regulatory readiness. That requires early identification of hidden chemistry, manufacturing, and controls (CMC) risks, robust conjugation strategies, and processes designed with clinical and commercial scalability in mind.

Expanding Modalities Are Increasing Development Complexity
ADCs and AOCs have very different starting points. ADCs are now a more established modality, with over a dozen FDA approvals and a clearer regulatory track record. AOCs are much earlier in development, but interest is growing quickly.

As both modalities move from promising concepts toward clinical development, the pressure shifts from what can be designed to what can be manufactured, characterized, and controlled at scale. ADCs can still present complex manufacturing demands, especially when newer conjugation strategies introduce multiple processing steps and specialist chemistries. AOCs bring additional uncertainty around analytical characterization, formulation, and regulatory expectations.

In both cases, demonstrating control over quality and consistency is central to clinical readiness, making early alignment between molecular design and CMC strategy essential.

For complex conjugates, choices around conjugation chemistry, linker-payload design, analytical strategy, and formulation all influence how easily a program can move from laboratory success to controlled, reproducible manufacture. Addressed too late, these considerations can introduce unexpected complexity into scale-up, characterization, or process control.

Glycan remodeling strategies in ADC development are a prime example. These approaches modify specific sugar structures on the antibody to create more uniform and stable conjugates, a level of control that is highly attractive in early research. However, they often add manufacturing complexity. Preparing these ADCs can involve multiple sequential enzymatic steps, specialist linker-payload synthesis, and complex carbohydrate chemistry. A process that looks efficient at small scale can become harder to control, reproduce, and scale in a manufacturing environment.

Characterization Must Keep Pace with Complexity
A similar disconnect can emerge through limitations in analytical capabilities.

In AOC development, oligonucleotides introduce extraordinary molecular complexity. A single oligonucleotide sequence can exist in an enormous number of conformations, creating challenges in controlling conjugatable impurities and understanding product heterogeneity. Developers must consider how the antibody and oligonucleotide behave independently, and how the combined conjugate can be characterized and controlled as one product.

Although existing tools can assess certain ADC and AOC attributes individually, fully characterizing the aggregate conjugate population remains difficult. As these molecules become more complex, gaps in analytical understanding can make it harder to establish robust control strategies, assess product consistency, and support scalability.

Building CMC Into Early Development Decisions
Early CMC alignment starts with defining what the program is trying to build and what success looks like from a manufacturing perspective. For complex conjugates, this means looking beyond activity at small scale and asking whether the molecule, process, and analytical strategy can support reproducible clinical manufacture. In some cases, developers may need to reconsider or modify promising molecular designs if the associated manufacturing complexity introduces excessive risk, cost, or scalability limitations.

Several priorities can guide these decisions:

Start with the intended product manufacturing profile. A clear quality target product profile (QTPP) gives teams a practical reference point. It defines the physical and chemical characteristics the molecule needs, and the level of control required to support quality, safety, and future scalability.

Assess what is technically possible early. Once the QTPP is clear, developers can evaluate which conjugation routes are realistic and whether they can support larger-scale manufacture. This means considering whether the chemistry, purification approach, and analytical strategy can deliver the desired molecule without creating unnecessary process complexity, difficult-to-control impurities, or scalability limitations.

Build the control strategy around known risks. A control strategy should reflect where the program is susceptible to variability, whether in conjugation efficiency, impurity formation, product heterogeneity, or purification. Identifying these pressure points early focuses work where it has the greatest impact. This is particularly important because manufacturing control and reproducibility remain central regulatory expectations.
CMC then becomes part of the program's direction from the beginning, not a set of issues to solve later.

Securing Future Success for ADC and AOC Development
The continued expansion of ADCs and AOCs is pushing conjugate development into increasingly complex territory. As they evolve beyond their original applications, developers face growing pressure to balance innovation with manufacturability, analytical control, and scalability.

At Abzena, we support these programs by bringing together cell line development, linker-payload design, bioconjugation, analytical development, and GMP manufacturing within one integrated team. Drawing on 25 years of bioconjugate expertise, we focus on getting it right from the start, so design choices are made with manufacturability in view.

As conjugate modalities become more sophisticated, the programs most likely to succeed will connect molecular design, CMC strategy, and process control from the earliest stages of development, with close coordination between discovery, analytical, and manufacturing teams.



Planning an ADC or AOC program? Discover how Abzena can help you build manufacturability into your conjugate from the start at abzena.com.

Andrew Waters: Shaping the Next Chapter for Stevenage Bioscience Catalyst



Andrew Waters became Interim CEO of Stevenage Bioscience Catalyst (SBC) in January 2025, before being appointed permanently as Chief Executive Officer, after the sad passing of the late Dr Sally Ann Forsyth OBE DSc.

Having joined SBC as Chief Financial Officer in September 2023, Andrew brings extensive commercial and life sciences experience gained across PwC, GSK, biotechnology start-ups and public companies.

Here, Andrew discusses his vision for the campus and how SBC will continue helping innovative life sciences companies start, grow and succeed.

What are your immediate priorities as CEO?
It is a great privilege to lead SBC, particularly following Sally Ann, whose vision and commitment helped create the strong, collaborative community we have today. My first priority is to build on those foundations and keep doing what we are doing whilst preparing SBC for its next stage.

We are starting from a position of strength. Almost 50 companies are now based here, our campus is 80% occupied and our businesses have raised more than £35 million in new investment since January. We also have an impressive track record and a concentration of scientific talent that makes SBC distinctive.

My focus is on setting a clear strategy for our next phase. That means attracting ambitious companies, helping existing occupiers secure the financing that they need to scale and ensuring they have the flexible space, scientific facilities, connections and business support they need.

As an independent, not-for-profit organisation, we can take a long-term view and reinvest in the campus and its community. We want SBC to remain a leading UK life sciences incubator and an environment in which innovative businesses and their people can perform their best work.

What will be central to SBC's future strategy?
Our strategy will be shaped around the needs of our companies. Providing flexible laboratory and office space is important, but businesses need much more than a building. They need specialist AI enabled state-of-the-art equipment, scientific expertise, commercial guidance, access to people who understand the challenges of developing a life sciences business and investor connections.

Raising finance is arguably one of the hardest components of the drug development journey, and we will place increasing emphasis on facilitating this via a series of means including sharpening the focus on the pathway to regulatory approval, derisking the business plans and the clear identification and quantification of value creation and investor return. The sooner we can convert these great companies from recipients of R&D tax credits into payers of UK Corporation Tax the better (for everyone!).

Our CEO roundtables bring together leaders from early-stage start-ups through to established SMEs, enabling businesses at different points in their development to exchange experience, discuss common challenges and form valuable relationships.

How does the Catalyser programme support founders?
Catalyser is SBC's free off-site strategy retreat for early-stage life sciences and health innovation companies. It brings founders together with investors, pharmaceutical leaders and industry experts, creating an open environment in which they can challenge their assumptions, learn from one another and build relationships that continue beyond the programme. Following the success of the first retreat, Catalyser will now run twice a year.

How do you see science and technology evolving across the campus?
SBC's core purpose remains life sciences and therapeutic innovation, but the boundaries between biology, data, technology, diagnostics and medical devices are increasingly interconnected.

We already have companies operating at these points of convergence with some having products with utility in consumer healthcare markets.

AI and technology are progressing in tandem with life sciences, creating opportunities to analyse complex data, accelerate research, and develop more personalised approaches to healthcare. Supporting that evolution strengthens our ability to help companies translate innovative science and technology into better outcomes for patients.

What does GSK's relocation mean for SBC?
SBC is an independent, not-for-profit organisation and an established life sciences campus with a strong track record of its own. We are almost 80% occupied, home to almost 50 companies and continuing to welcome new businesses while existing occupiers scale. GSK's relocation will bring change and require careful planning, but SBC approaches that transition from a position of strength.

There are currently no planned changes to shared amenities and services while GSK continues to operate in Stevenage. Our focus remains on supporting our companies and working with GSK and other stakeholders to help retain scientific talent, expertise and innovation within the town.

What kind of campus do you want SBC to be?
I want SBC to be ambitious, entrepreneurial, state-of-the-art, inclusive and enjoyable, and a campus that continuously strives to be increasingly environmentally sustainable. Science brings people here, but the community is one of the main reasons they stay.

Professional events, mentoring and occupier lunches sit alongside salsa, cinema evenings, wellbeing sessions and seasonal activities.



Having fun on campus matters because informal relationships can lead to valuable ideas and collaborations. I believe people deliver their best work when they are enjoying their work.

We also have a responsibility to nurture talent within Stevenage. More than 100 local students applied for our latest work experience programme, while our school mentoring programme is fully booked into 2027. Success will mean combining scientific and commercial progress with meaningful local impact, ensuring SBC remains a dynamic community in which companies, people, and ideas can thrive.

https://www.stevenagecatalyst.com/

STEVENAGE BIOSCIENCE CATALYST

Why Smarter Trial Design and Early Regulatory Strategy Can Reduce Clinical Development Risk

Investors demand progress; patients cannot wait, and budgets are under growing pressure, yet clinical trial success rates remain challenging.

For many programs, the greatest risks arise not during execution, but from design decisions made before the first patient is enrolled.

Too often, trial design is treated as an operational exercise focused on timelines, recruitment, and budgets, rather than whether the study will generate the right evidence and align statistical, operational, and regulatory perspectives.
Innovative trial design and simulation technologies can help sponsors answer these questions before committing significant time, resources, and patient participation.

The Hidden Cost of Traditional Thinking
A common clinical development challenge is how trial designs are developed.

Statisticians are often engaged after core decisions have been made, leaving assumptions about endpoints, sample size, recruitment, variability, and treatment effect already embedded in the protocol. If those assumptions are wrong, the result can be costly amendments or failed studies.

This siloed approach is especially risky in areas such as precision medicine, rare diseases, and complex therapeutic modalities, where evidence-generation strategies require greater nuance.

A faster start-up is not always better. Taking time to evaluate design alternatives can reduce risk, shorten development timelines, and improve the likelihood of regulatory success.

Why Innovative Trial Designs Are Gaining Traction
Although the phrase “innovative trial design” can sound experimental, many approaches are becoming increasingly accepted by regulators and sponsors alike.

Adaptive trial designs, Bayesian methodologies, external control arms, master protocols, and synthetic control approaches are no longer theoretical concepts. In the right circumstances, they can offer practical solutions to longstanding development challenges.

This is particularly true in areas such as rare disease development, where patient populations are limited, and traditional randomized controlled trial designs may be difficult, slow, or even unethical to implement.

Regulatory agencies have demonstrated a growing willingness to engage with novel approaches when sponsors can clearly justify their scientific rationale and demonstrate that the chosen design will generate robust and interpretable evidence.

Importantly, innovation should not be viewed as innovation for its own sake. The goal is not to build complexity into a study. The goal is to improve efficiency, reduce unnecessary patient burden, strengthen evidence generation, and increase confidence in development decisions.

In some cases, a traditional design may still represent the best option. The challenge is ensuring that sponsors make that decision based on evidence rather than familiarity.

The Role of Simulation in Better Decision-Making
One of the most powerful tools available to modern development teams is clinical trial simulation.

Simulation enables sponsors to evaluate thousands of potential trial scenarios before a protocol is finalized. Variables such as recruitment rates, patient populations, endpoint performance, estimand strategies, treatment effects, and operational constraints can be explored in a virtual environment.

Rather than relying on a single set of assumptions, sponsors can understand how different design choices influence the probability of success. The value of these insights can be substantial. Identifying weaknesses before a study begins is far less expensive than discovering them after patient enrollment is underway.

Perhaps more importantly, simulation provides an objective framework for decision-making. It allows development teams to move beyond assumptions and quantify risk before significant investments are made.

Why Phase 2 Deserves Special Attention
Phase 2 remains one of the most challenging stages of clinical development. Organizations must determine whether a promising therapy has sufficient evidence to justify the significant investment required for pivotal studies. Unfortunately, uncertainty is high, while available data is often limited.

This makes Phase 2 an ideal opportunity to apply simulation-driven approaches.

By stress-testing trial assumptions and exploring alternative development pathways, sponsors can improve study design quality and reduce the likelihood of avoidable failure. Better-informed decisions at this stage can have a profound impact on program-wide outcomes, helping organizations allocate resources more effectively while preserving optionality for future development.

For emerging biotechs operating with limited capital, these decisions can be especially critical. Every development milestone matters, and every avoidable risk represents potential value preservation.

Building Confidence Through Cross-Functional Collaboration
Clinical development will always involve uncertainty, but organizations can improve their odds by breaking down silos and approaching study design as a strategic discipline. Strong development programs involve statisticians, regulatory experts, clinicians, and operational leaders early in planning. Together, they can challenge assumptions, evaluate alternatives, and use simulation to assess the impact of key decisions before they are built into the protocol.

When each development decision carries significant financial, operational, and patient implications, this integrated approach can help reduce risk, support faster timelines, and improve the likelihood of clinical and regulatory success.

MMS helps sponsors evaluate innovative trial designs, leverage simulation technologies, and align regulatory strategies to support more confident development decisions. Learn how a data-driven approach can help de-risk your next clinical program: https://mmsholdings.com/ai-technology/keruscloud-clinical-trial-simulation/

Beyond Hiring: Rethinking Talent Strategy in a Changing Biotech Market

The biotech industry feels noticeably different today than it did 18 months ago. Some challenges remain the same: funding remains selective, investors continue to scrutinise spending, and leadership teams are being more deliberate about growth. Ever resilient, the industry has adapted to these challenges, and now, many emerging biotech companies are looking to prepare for the next phase of development, with one key difference: how those organisations are thinking about talent.

Over the last year, I've had conversations with many companies which were seeking advice on how to approach their talent strategy as they scale. Whilst the companies were at different stages, and had different scientific objectives, each shared the same challenge: finding the right people, at the right time.

Larger organisations can lean on internal talent acquisition teams, market intelligence capabilities and dedicated workforce planning tools to identify, hire and onboard the right people to grow their teams. However, without access to expensive software and expertise in-house, scaling your team and securing specialised expertise can take a significant amount of time and expense.

A poorly aligned hire in a large organisation is often recoverable. In a biotech with fewer than 100 employees, the consequences can be much greater. Critical positions in regulatory affairs, clinical operations, medical affairs, biometrics or technical operations directly influence a company's ability to generate data, achieve milestones, and maintain momentum. For biotech companies, every hire counts, and that reality changes the conversation from simply filling vacancies to making informed talent decisions.

One challenge I frequently see is that planning starts too late. Founders and leadership teams quite rightly focus on science, investment and operational priorities. Hiring becomes something that happens once funding is secured or programme activity increases. The risk is that talent does not move at the same speed as funding, and the timeline to secure a key hire may delay or risk other milestones downstream.

The most effective organisations are not just thinking about scaling their team before they need to hire; they are adopting a new, more flexible approach to their talent strategy. Instead of hiring people to fill resource gaps, they are considering which skills are needed, where those skills are likely to come from and whether those capabilities are best secured through permanent hires, consultants, or specialist partners. They are also recognising that the right talent strategy often changes as the company, and the market, evolves.

Although each company has different challenges to address, there are some overall trends and similarities. At the earliest stage, the key challenge is usually finding highly specialised skills rather than managing hiring at volume. So, organisations turn to workforce consultancy and recruitment partners who understand niche markets.

As companies enter clinical development and begin to grow, the focus shifts towards scalability. Leaders need to balance speed, quality, and cost while building teams capable of supporting increasingly complex programmes. Often, this is where outsourcing or contract hires are preferred: offering flexibility dependent on project requirements.

Later, as organisations become more established, different questions emerge. Workforce spend, vendor management, contingent labour usage and operational efficiency become increasingly important. At that point, leadership teams often face a strategic choice about whether to continue outsourcing elements of talent acquisition and workforce management or build greater internal capability.

This pathway may fit most biotech organisations, but we are increasingly seeing resourcing conversations with biotech companies evolving into broader discussions around workforce strategy. Which role should be prioritised first? Is a permanent hire the right answer? How do you balance specialist expertise with long-term team development? How do you ensure cultural fit and retention as the organisation grows?

I would encourage any biotech company thinking about growth to take a step back and ask a simple question: is the challenge a lack of resource, or access to the right resource?
The answer is not always another hire. Sometimes it is market insight, workforce planning, specialist expertise, or a different resourcing approach altogether. The organisations that consistently make the best talent decisions are often those that take the time to understand all of their options before committing to one path.

The strongest organisations I encounter view talent strategy as a competitive advantage rather than a support function. They seek to understand market availability before launching searches. They benchmark against competitors. They assess whether their employee value proposition reflects what specialist talent is looking for. They gather intelligence that helps them make better talent decisions. They recognise that a key part of the challenge is not simply finding people, it is determining which capabilities will have the greatest impact; how those individuals will strengthen company culture, and how their decisions will build a team that can grow and stay engaged as the organisation evolves.

In a market where every hire matters, organisations that engage workforce expertise early are often better equipped to navigate both immediate hiring challenges and future growth. With the right insight, planning and support, they can build a resourcing strategy that evolves alongside the business and ensures critical capabilities are in place when they are needed most.

By James Minogue, Business Development Director, Advanced Clinical



Advanced Clinical

Beyond The Science: What it Takes to Build a Life Science Company

At BIO-Europe, much of the conversation will inevitably start with the science. The harder questions come next. Can promising research become a durable, globally competitive company? Does the team have the people, capital, and commercial discipline to make that happen? And, are investors prepared to take the risks required to get it there?



For Dr Rich Ferrie, CEO of Babraham Research Campus, the distinction is fundamental. “The quality of the science is necessary, but not sufficient,” he says.

It is a point worth carrying into the meeting rooms and partnering conversations at Bio-Europe. Compelling data and scientific differentiation command attention, but Ferrie argues that company-building often determines what happens next. That means assembling the right people, capital, infrastructure and commercial knowledge, then applying the discipline to use them effectively. The science creates the opportunity, but it can’t build the business around itself.

Ferrie sees that challenge at close quarters. Appointed CEO of Babraham Research Campus earlier this year, after nearly five years leading the London Bioscience Innovation Centre, he now heads a Cambridge campus that brings together more than 60 life science companies, around 2,000 employees and 300 academic researchers, with the Babraham Institute co-located on site.

For Ferrie, that surrounding environment is not peripheral. “The best ecosystems don’t simply provide labs; they help founders turn science into investable, scalable businesses,” he says. “The difference is often not the quality of the science, but whether the company has created the conditions in which that science can actually become a successful business.”

That changes the investment lens, particularly when investors are meeting early-stage companies whose science still carries significant risk. Ferrie argues that the founding team deserves closer attention. Can its leaders learn and adapt? Are they focused on a validated unmet need? Do they have the right ecosystem around them?

Capital discipline belongs in the same assessment. Ferrie highlights capital efficiency and a clear path to the next value inflection point as indicators investors should examine alongside the science. His formulation is simple: “Great science captures the imagination; great teams know how to convert it into value.”

For the European life science community gathering at Bio-Europe, there is a wider issue at stake. Ferrie sees a mismatch between the continent’s scientific strength and the financial support available to the companies emerging from it.

“Have confidence in Europe,” he tells investors. “We have an extraordinary concentration of scientific talent, world-class research institutions and sophisticated life science ecosystems. But we undervalue and under-capitalise our domestic companies.”

The issue is not only how much capital Europe can mobilise. Timing also matters. Ferrie argues that investors need to back companies through the development journey rather than waiting until the science has already been de-risked. Without that commitment, Europe risks

generating scientific value without capturing as much of the economic and social value that follows.

None of this removes the uncertainty inherent in life science development. Strong management cannot make weak science work, just as capital cannot guarantee a successful product. Ferrie's point is more exacting: scientific excellence opens the door, but people, capital, networks and execution determine how far a company travels through it.

Babraham Research Campus offers a practical example of what that broader company-building infrastructure can look like. LiveLabs gives early ventures access to fully managed shared laboratory space, while ScaleLabs provides dedicated wet-lab and write-up facilities for companies establishing and expanding their own operations. Companies can also access shared scientific capabilities through the relationship with the Babraham Institute, including genomics, imaging, flow cytometry and bioinformatics.

The Campus also addresses the commercial side of company formation. Accelerate@ Babraham, its pre-seed programme, combines mentoring and an intensive taught programme with laboratory access and non-dilutive funding. The emphasis is not simply on generating more science, but on testing commercial propositions, developing companies and connecting founders with investors, advisers and industry expertise.

That matters because laboratories alone do not constitute an ecosystem. Neither does proximity. The value lies in whether infrastructure, experienced people, commercial support, capital, and networks come together when young companies need them.

For those arriving at Bio-Europe to find science, capital, companies or partners, Ferrie's argument offers a useful challenge to the usual starting point. Europe already knows how to produce excellent research but building global companies from it is a different task. Babraham Research Campus' model represents one attempt to create the conditions Ferrie believes those companies need; investors determine another. Ultimately, both will be judged by the same measure: whether promising science has to become a sustainable business before others are prepared to recognise its value.

https://www.babraham.com/

Babraham Research Campus



Look East: APAC for Broader Development Options

Innovation Statement – a call to global biotechnology action

Given that recruitment capacity and speed are considered to be some of the highest risks to the success of drug development programmes by Pharma and Biotech alike, coupled with issues with accessing appropriate patient populations in regulatory compliant environments in the face of spiralling costs to deliver clinical trials, it is no wonder that Pharma Executives are exploring alternative means to conduct the necessary trials required for licensing approvals.

Pressure on clinical trial sites in what are considered to be traditional country settings has resulted in challenges on development timelines and extended recruitment periods which creates significant commercial disadvantages for those who are unable to generate the required data within an optimal timeframe. The search for solutions has been very much a hot topic over a number of years.

In this context, the expanded use of alternative settings and countries in which to run studies has proved to be a very credible solution for those companies who are prepared to consider alternative geographic regions for trials, not only in the later development phase setting, but also for proof of concept and confirmatory studies.

It is evident that there are considerable benefits of conducting trials in countries of the Asia-Pacific (APAC) region with highly compelling arguments supporting this case. Accessing highly competent world-class trial sites run by a well-educated workforce provides a credible alternative to the resource-challenges and participant availability of more traditional trial settings. Competent Regulatory Authorities are now open to, and accepting of, the contribution of patients from regions outside of the traditional axis of North America and Western Europe.

With this coming of age for APAC countries as preferred destinations to conduct drug and device clinical trials, key benefits can be identified in terms, not only of the value of Asia inclusion to accelerate development itself, but also in expanding options for future marketing coverage. Furthermore, these advantages extend to improved and reliable participant recruitment, cost-effective trial delivery, access to treatment naïve as well as specific patient disease pools and more ready access to the lucrative Asian market. Developing products in Asia should no longer be considered something to be done after Western registration but incorporated early and as central to any global development plans.

Early phase trials lend themselves well to participant recruitment from countries such as South Korea, Japan, Taiwan, Singapore, Hong Kong and Australia, which are home to sizable numbers of medical Centres of Excellence, with high-tech equipment levels as standard, and considerable advantages in terms of cost (both participant and for trial delivery) and recruitment-retention rates delivered at the highest levels of study quality. In later phases of development, accelerated recruitment results from access to a broader range of countries with established quality site networks and large populations such as Malaysia, Philippines, Thailand, Vietnam etc. With disease patterns that reflect those of western populations, access to patient pools within such well-structured clinical settings provides a high motivation for those planning trials and access to populations in the higher frequency areas such as oncology, neurological and cardiovascular as well as for rare disease indications where centralised treatment approaches require dedicated centres of excellence.

Taking a deep dive into some of the country trial settings, using South Korea, as an example, has a centralized healthcare system and national insurance coverage providing rapid, reliable and consistent patient recruitment and retention, with experienced investigators and sites at globally accredited hospitals with extensive clinical research experience. Additionally, efficient processing by the Korean regulatory agency MFDS typically completes reviews within 60 days. There is an advanced clinical trial infrastructure with global-standard trial sites (ICH-GCP, FDA, EMA) with proven track record and high data quality are compelling arguments for Korea to be considered central in any trial recruitment strategy.

With Japan where it has seen considerable improvements in regulation, with the PMDA providing a collaborative and positive environment both for consultation and support with considerably shortened review times for development programmes. Japan uses a highly patient-centric approach to incorporate patient engagement into most aspects of clinical trials, from informed consent to trial design and uses innovation to capture decentralized data such as that from online medical examinations, home health visits, and mobile health monitoring solutions to make it easier for trial participants to be informed and remain engaged.



Japan and other APAC countries additionally have multiple site management organizations which partner with medical institutes providing broad geographic reach, which enables more strategic site selection and patient identification as well as streamlined trial conduct and consistency of oversight.

For access to the opportunities afforded by working in Japan, Korea and beyond in the APAC region, specialist assistance is provided in partnership with established companies such as CMIC Group with their full-service clinical capabilities across more than 12 APAC countries and with uniquely integrated nonclinical services including laboratories and manufacturing facilities.



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Why Australia? A Gateway to Global Clinical Development

For international sponsors considering where to conduct clinical research, Australia offers a particularly compelling combination of scientific expertise, sophisticated healthcare infrastructure, an internationally recognised regulatory environment and a highly diverse population.

One of the most significant advantages is that **clinical research conducted in Australia can generate data that are relevant not only to the Australian market, but to global regulatory submissions.**

Australian clinical trials are conducted according to internationally recognised Good Clinical Practice standards aligned with ICH requirements. Australian Clinical Trials notes that data generated through Australian trials are robust, inspection-ready and routinely accepted by major regulatory authorities, including the **US Food and Drug Administration (FDA), European Medicines Agency (EMA) and Health Canada.**

For sponsors, this can be a major strategic advantage.

Rather than conducting a study in Australia and then automatically having to repeat the same study elsewhere simply to generate regulatory-quality evidence, a well-designed Australian clinical trial can potentially contribute directly to an international development program and subsequent regulatory submissions.

Of course, acceptance is dependent on the individual study, its design, conduct, population, endpoints, and the requirements of the relevant regulator. But the ability to generate internationally usable clinical evidence in Australia can substantially improve the efficiency of global drug development.

A remarkably diverse patient population
Australia also offers something that is increasingly important in modern clinical research: **population diversity**.

Australia is one of the world's most multicultural developed nations. According to the Australian Bureau of Statistics, **32% of Australia's population — approximately 8.8 million people — was born overseas as at 30 June 2025**. Almost every country in the world is represented among Australia's overseas-born population.

This diversity provides an important opportunity for clinical research.

For sponsors developing medicines intended for global populations, recruiting participants from a culturally and ethnically diverse population can contribute to a broader evidence base and provide insights into how treatments perform across different patient backgrounds.

Australia's multicultural population includes substantial communities originating from Asia, Europe, the Middle East, Africa and many other regions. This can be particularly relevant for studies where diversity of participants is an important consideration in the development program.

For Alithia, this combination of internationally recognised clinical research standards and Australia's diverse population represents one of the country's greatest strengths.

The economic advantage: Australia's R&D Tax Incentive
There is another compelling reason for international sponsors to consider Australia: The Australian Government's **R&D Tax Incentive**.

The incentive is designed to encourage companies to undertake eligible research and development activities in Australia by providing a tax offset for qualifying R&D expenditure. For eligible companies, it can significantly reduce the effective cost of conducting qualifying research.

For biotechnology and life-sciences companies — particularly emerging companies where development costs can be substantial — this can have a meaningful impact on the economics of a clinical development program.

Importantly, the R&D Tax Incentive is subject to eligibility requirements. Not every cost associated with a clinical trial will automatically qualify, and companies need to ensure that activities and expenditure meet the relevant legislative requirements.

When appropriately structured, however, the combination of **high-quality clinical research, internationally acceptable data, access to a diverse patient population and Australia's R&D incentives** creates a particularly attractive proposition for global life-sciences companies.

Where Alithia fits
This is where Alithia Life Sciences brings an additional dimension to the Australian proposition.

Australia provides the environment. **Alithia provides the expertise, relationships, and local knowledge to navigate it.** Founded by **A/Prof Tina Soulis**, Alithia was created around the belief that clinical research can be both scientifically rigorous and highly personal.

As a boutique CRO, Alithia is deliberately different from the large global CRO model. Clients have access to experienced professionals and senior leadership, rather than becoming one project among hundreds within a large organisation.

The objective is not simply to execute a protocol.

It is to understand the scientific objectives of the program, the commercial realities facing the sponsor and the ultimate regulatory pathway — and then design and deliver the Australian clinical research strategy accordingly.

For an international biotechnology or pharmaceutical company, that can mean having a partner capable of connecting the **Australian clinical research ecosystem with a global development strategy**. And that is ultimately the opportunity Alithia sees for Australia.

Australia offers world-class science, internationally recognised clinical research standards, a diverse patient population and significant R&D incentives. Alithia brings those advantages together with a founder-led, highly experienced and genuinely collaborative approach to clinical research.

For sponsors looking to generate high-quality clinical evidence that can contribute to global development, Australia is not simply a place to run a clinical trial.

It can be a strategic gateway to the world.

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Make the Molecules that Matter

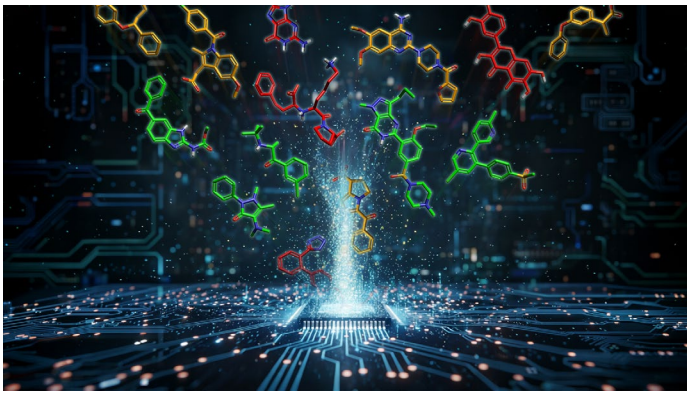
Generative chemistry is changing the pace of early drug discovery. Thousands of new structures, from close analogues of known hits to scaffold-hopping ideas which explore entirely new regions of chemical space, can now be created in minutes using generative models. As generative models expand the number and diversity of molecular ideas available, the challenge for drug discovery teams shifts from producing more molecules to selecting and progressing the ones that matter. The value lies in combining molecular generation with clear design constraints, 3D structural context, property filtering and expert judgement to identify compounds that are genuinely worth making.

From Volume to Value

In drug discovery, chemical novelty is important to differentiate intellectual property space, overcome known liabilities, or reveal new ways to engage a target. A new molecule also needs to be biologically relevant and synthesizable to be experimentally tested and developed.

Novel molecules must be potent against the desired target, selective enough to avoid unwanted side effects, sufficiently stable and soluble, have the appropriate ADMET profile, and realistic to synthesize. In an environment where experimental capacity is limited, the real value of generative AI lies less in volume and more in prioritization and quality of the molecules generated, helping the project team decide which ideas are worth making into physical compounds.

Physics-based and AI-based molecular design approaches driven by machine learning architectures can suggest new structures while being guided by the user design objectives. Many generative molecular design tools (such as REINVENT) allow an existing model, or prior, to be retrained to generate molecules tailored to the desired chemical space. However, a model still may produce structures that look interesting but contain liabilities that make them poorly suited to the biology of interest.



Prioritize with 3D Awareness and Properties Filters

This is where 3D approaches become critical. A protein binding site recognizes molecules in 3D, through shape, electrostatics, and interaction patterns. Two compounds can appear dissimilar in 2D yet present similar electrostatic and shape to a protein binding site, while a small structural change can disrupt the interaction pattern that is important for activity.

Generative models can be trained or scored using whole molecule shape and electrostatic similarity to preserve the features that a protein 'sees'. Where a suitable protein structure is available, docking provides a structure-based route for steering generation towards molecules predicted to adopt plausible binding poses and make key interactions within the protein binding site. These complementary methods can help preserve features relevant to target recognition, while still allowing THE design of new molecules that are patentable and synthetically tractable.

The best workflows combine this 3D awareness with property filters. Molecules can be assessed for physicochemical properties, predicted ADMET behavior, unwanted substructures, reactivity risks, toxicity alerts, and synthetic feasibility before they reach the bench. Such properties should not be used as hard filters as early projects often require informed risk taking, and overly rigid rules can remove promising ideas.

Instead, the goal is to create a triage process that highlights molecules with the most balanced prospects, across potency, selectivity, novelty, developability and ease of synthesis.

The most effective workflows will therefore include molecular generation, scoring, and prioritization. A model may propose R-group replacements around a known series, suggest scaffold alternatives, or explore entirely new regions of chemical space. Those outputs can then be ranked using multiparameter optimization, predicted activity and selectivity models, free energy calculations where appropriate, and medicinal chemistry review. The aim is not to create a fully automated pipeline, but to create a more streamlined workflow that helps scientists make better informed decisions.

Reusable and Reproducible Models
An underappreciated advantage of generative chemistry workflows is reproducibility. When a model is trained on a project with relevant structures and design constraints, it becomes more than a one-time idea generator. It becomes a reusable project asset. The same model, or the same training strategy, can be shared between colleagues, revisited as new data is generated, and refined as the project moves from hit identification into hit-to-lead and lead optimization. In this way, generative chemistry can support continuity, helping teams capture not just molecules but the design logic behind them.

Expert Judgment Remains the Advantage
Expert review remains central to the workflow. The AI generative workflow value is greatest when it works alongside medicinal chemists, computational scientists and biologists, extending the range of ideas and exploring alternatives that might otherwise be missed. Scientists still need to judge whether the proposed changes make mechanistic sense, assess the synthetic routes, and whether the compound is worth testing experimentally.

As generative AI becomes increasingly accessible, the competitive advantage will not come from generating the largest number of compounds. It will come from asking better questions. For example, which molecules retain the interaction pattern important for the activity? Which ones move us into a different chemical space? Which molecules are likely to have the right balance of properties? Which ones can be made quickly enough to influence the next design cycle?

Generative chemistry gives scientists a powerful tool to design more molecules, faster. The next challenge is to incorporate the physics, data, filters, and expertise needed to choose wisely. The future of AI-based molecular design will not be defined by how many structures can be generated, but by how effectively teams can identify, make and learn from the molecules that matter.

About Cresset®
Cresset develops solutions that helps scientists discover and design better drugs faster. For more than 25 years, Cresset's technology has supported researchers in understanding molecular interactions, predicting compound behavior and making informed discovery decisions. Cresset's solutions are used by pharmaceutical, biotechnology, agrochemical, and academic organizations worldwide to advance research from early discovery through lead optimization.

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Learning from Process Engineering: What a “Design Space” Could Mean for Antibody Discovery

Teresa Barata, Chief Scientific Officer, FairJourney Bio

Process engineers in biomanufacturing have spent two decades working with a concept that discovery scientists rarely borrow: the design space. Defined in regulatory guidance as the multidimensional combination of input variables and process parameters demonstrated, together, to assure product quality, it exists precisely because singleparameter optimization, tightening one variable at a time, routinely fails to predict how a process behaves once several variables move at once [1,2]. The insight is not that any individual parameter matters less. It is that all parameters interact, and a process understanding only one dimension at a time will miss combinations where that interaction changes the outcome.

Good Solutions, Borrowed From Another Discipline

Antibody discovery, particularly for multicomponent molecules such as bispecifics and conditionally active formats, increasingly resembles this same structural problem, even though the field rarely names it that way. A binder’s affinity, a format’s geometry, and a molecule’s downstream manufacturability do not behave as independent variables to be optimized in any sequence. They interact, often in ways that only become visible once several of them are varied together rather than one at a time. Treating them as a queue of separate decisions, hit selection first, format applied afterward, developability assessed last, risks exactly the failure mode that process engineering identified and built a formal framework to address: a result that looks acceptable along each dimension considered alone, but was never actually tested across the combination that matters.

Naming the Problem Properly Helps

This matters because the two framings, sequential optimization versus a defined multidimensional space, lead to different practical behavior. Sequential optimization treats each stage as closed before moving to the next, affinity is settled, then format is chosen, then developability is checked. A designspace framing instead asks, before committing to any single value, what range of each variable remains compatible with the others, and screens within that combined space rather than along one axis at a time. A recent review of Quality by Design practice across pharmaceutical development makes a related point about biologics specifically: as molecular architectures become more complex, the critical quality attributes that matter are increasingly defined by combinations of parameters rather than by any single one in isolation, and development strategies that do not account for this interaction tend to surface problems later, and more expensively, than those that do [1].

A concrete illustration from recent antibody engineering work makes the same point. A switch antibody programme targeting interleukin12, in which scientists at FairJourney Bio led the antibody discovery and engineering work, required two binding properties on the same molecule to sit within a jointly defined range, one deliberately weaker than the other, rather than each being independently maximized [3]. Neither value, considered alone, would have indicated whether the molecule could work. Only the combination did. The engineering task was therefore to find a region where both properties held simultaneously, a design space in miniature, rather than to optimize either property on its own terms.

A Shift Worth Making

None of this requires new tools so much as a change in how a discovery programme frames its own early decisions. Asking, at the outset, which combinations of architecture, affinity, and manufacturability need to hold together, rather than asking what the best value of each looks like in isolation, is a small reframing with real consequences for how a screening strategy gets built. Process engineering adopted this discipline because sequential optimization kept missing interactions that mattered. There is good reason to think antibody discovery, for an increasingly complex class of molecules, is due the same shift.

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For more information, see www.fjbio.com

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