



ON Helix
2024



A photograph showing a panel discussion at the ON Helix 2024 conference. Three people are seated at a long wooden table on a stage. The man on the left is gesturing while speaking. The woman in the middle and the man on the right are listening. In front of them are several glasses and water bottles. The audience, seen from behind, is seated in rows of chairs, facing the stage. The background is a plain white wall with faint silhouettes of people.

ON HELIX REVIEW

A review of our annual ON Helix conference - a one-day conference on New Horizons for Bio Innovation that addresses key bio innovation trends, from developments in life science and technology research to their translation into new diagnostics, prevention tools or treatments.

Cambridge, UK



A wide-angle photograph of the ON Helix 2024 conference. In the foreground, the backs of many audience members are visible as they sit in rows of chairs, facing a stage. On the stage, a panel of six people is seated at a long table. Behind them, a large screen displays the event's title and a list of speakers. To the right of the stage, a tall, narrow banner lists sponsors. The room has a modern, bright interior with a white ceiling and walls.

ON Helix
2024

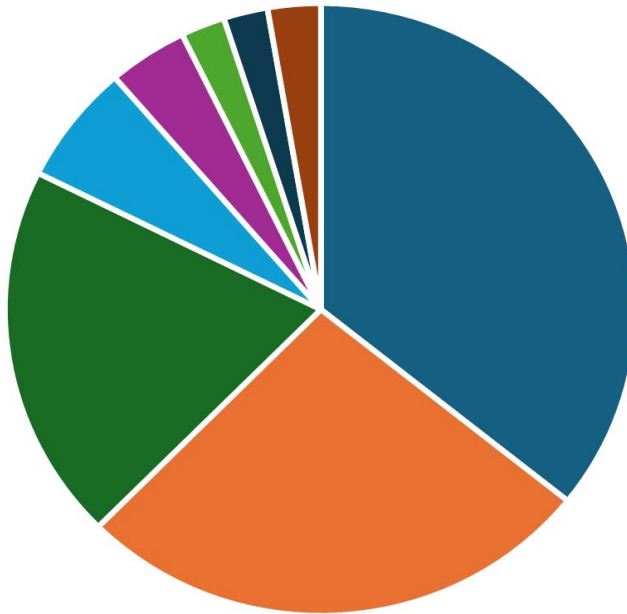
ON HELIX 2024 OVERVIEW

Success in life sciences relies upon deal flow, whether those deals are investments, collaborations, leasing, recruitment, or outsourcing to harness expertise and capacity. One Nucleus serves to nurture the best possible environment for such deal flow. This fits with a mission to help foster accelerated translation of great innovation into great products that markedly improve patient outcomes. The annual ON Helix conference plays a vital role in this mission by exploring the key R&D developments guiding the advancement of research and technology to deliver on the sector's vision of better patient treatments for all.

Under the headline theme of 'New Horizons for Bio Innovation', this year's conference saw delegates from over 130 diverse companies engage in thought leadership debate around a range of key themes currently shaping our sector. These included New Modalities, Biomarker Technologies, TechBio, and Translational Research in a Global Village. Over 25 expert speakers engaged the audience through a dynamic programme featuring keynotes, case-study presentations on cutting-edge science, and insightful panel debates.

The ON Helix Review captures the key thought-provoking takeaways from these presentations and panel discussions whilst recognising the wide variety of expertise in attendance, including the 20 sponsors and exhibitors at the event for whose support we are very grateful. The diversity of attendees is displayed on the next page.

Distribution of Attendees by Sub-Sector



- CRO/CMO/CDMO/Res. Serv.
- Professional Services
- Primary R&D
- R&D Facilities
- Drug Dev Regulatory Advisors
- Investment
- Trade Support
- Press

The knowledge-sharing among the attendees, each bringing their own experience, know-how and thinking to the debate enabled us all to learn what works, what doesn't, and what might one day. The conference provided an excellent platform to collectively develop solutions to shared challenges, by fostering creativity and innovation, ultimately helping to improve treatment options for patients. This common objective unites all stakeholders above and sits at the heart of what we all strive to do.



The ON Helix 2024 Thought Leaders:



Jon Green

New Horizons for Therapeutic Modalities



Kia Pedersen
Pelago Bioscience



Amir Hefni
Resolution
Therapeutics



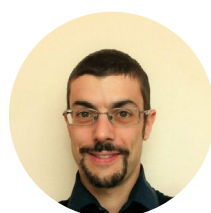
Madeleine Wakeling
Harness Therapeutics



Hugh Nuthall
Eli Lilly and
Company



Benjamin Taylor
AstraZeneca



Davide De Lucrezia
Officinae Bio

New Horizons for Biomarker Technologies



Chris Hodkinson
Owlstone Medical



Mark Eccleston
Volition Rx



Jenny Barnett
Monument
Therapeutics



Edward Rainsford
Appleyard Lees



Johannes Stanta
Celerion



Yue Xuan
Thermo Fisher
Scientific

TechBio – Is it Truly Simplifying Complexity?



Susana Tomasio
Collaborative
Drug Discovery



Carina Kern
LinkGevity



Naveen Kaushik
Zenzero



Rowan Gardner
PrecisionLife



Cam Watson
Nuclera

Translational Research in a Global Village



Ross McNaughton
Taylor Wessing



Katie Binley
Ikarovec



Matthew Fyfe
STORM Therapeutics



Mike Davies
Carocell Bio



Hazel Jones
Enhanc3D Genomics



Orestis Tzortzoglou
BioMed Realty



Barbara
Domayne-Hayman
The Francis Crick
Institute



Kathryn Chapman
Babraham Research
Campus



Michel De Baar
MSD



Phil Spearpoint
EY-Parthenon



Claire Thompson
Agility Life Sciences



New Horizons for Therapeutic Modalities

Keynote Presentation



Kia Pedersen, COO at Pelago Bioscience, opened the conference programme with a keynote presentation highlighting the acceleration of innovation in therapeutics that is driven by an explosion of new drug modalities reaching the market. While mature small molecules still dominate the market share of all

drugs sold, both traditional and advancing modalities, such as innovative antibody and cell and gene therapies, offer valuable lessons to guide future innovations. By leveraging lessons learned from earlier drug development challenges, researchers can more effectively overcome challenges in the development pathway for emerging modalities.

Company Pitches



Amir Hefni, CEO at Resolution Therapeutics talked about developing engineered pro-regenerative macrophages for end-stage liver disease. This innovative approach aims to prevent the need for liver transplantation in patients presenting with adverse side-effects in A&E by infusing macrophages that prevent scar formation.



Madeleine Wakeling, SVP Programme Management and Operations at Harness Therapeutics, talked about the complex biology of controlled upregulation of targets for developing therapeutics in the CNS field. Techniques such as steric blocking antisense oligonucleotides (ASOs) have achieved a 30% elevation in expression of FAN1, which has an association with the progression of Huntingdon's disease (HD).

Panel Discussion



Hugh Nuthall, Executive Director, Search and Evaluation, Neuroscience at Eli Lilly and Company, led a panel with expertise across a broad range of therapeutic modalities to explore examples of great innovation along with some of the challenges still faced in advancing them. The key messages included:

A Broad Range of Definitions:

There is no one definition of a therapeutic modality. Exploring a new therapeutic modality could include innovations in delivery methods, target biology, or repurposing existing technology in new ways. When exploring new modalities, it is important to factor in the final impact on the patient. For example, developments in one modality can offer valuable lessons that can be applied to advance progress in other new modality applications. The panel gave the example of how experience gained from developing CAR-T therapeutics provides insights to advance autologous macrophage cell therapy.

Regulatory and Commercial Hurdles:

Whilst it may be a well-trodden path for established modalities in terms of regulatory approach and commercial models, some of the emerging modalities require a new way of thinking. For instance, oligonucleotide therapeutics do not neatly fit into an existing category but fall into a unique space between small molecules and biologics. It is especially important in these instances to engage and align with regulators to understand the evidence and supporting data that they require to expedite approval for such a product. Forming an early dialogue to inform strategic planning with regulatory bodies at the CMC stage is essential to increase the likelihood of a successful application, saving both time and cost, which is critical for smaller businesses. The panel also highlighted allogeneic cell therapies, which are a lot more complicated and less well understood compared to their autologous counterparts. It was reassuring to hear from the panel that both the MHRA and FDA are encouraging early engagement.

Good Assets Can Be Destroyed by Bad Decisions:

Innovation in therapeutic modalities relies on having the right team of key suppliers and stakeholders around the table to address challenges in manufacturing and safety early. Forming strategic partnerships and co-developing rather than transactional relationships is key to getting the right support throughout clinical development, increasing the chances of clinical success. The later you leave risk management, the harder it is to make a change, often resulting in greater cost and less flexibility for improvement or pivoting of the approach.

The Right Treatment for the Right Patient:

A patient-centric approach is critical in developing medicines that can lead to better outcomes for patients. Health providers often go with the cheaper option first, but how can we change this so that we are offering treatments that are potentially curative? The panel make-up exemplified how we are building a toolbox of options and how we can improve patient outcomes by selecting the right treatment for the right patient. This involves factoring in the most appropriate modality for the disease, based on safety, cost, and accessibility considerations. Although cell therapies hold the potential to be curative, a lot of patients are unable to access them. In contrast, small molecules, if deemed to be feasible treatment options for the disease and stage, could improve accessibility for a broader range of patients.

Role of AI and ML: We Cannot Do Anything Without Good Quality Data:

The panel drew on examples of how utilising AI and ML were applicable in the context of new modalities. For example, technologies such as digital twins can enhance efficiency and safety during development and bring novel modalities to the market. The ability to use these approaches to analyse large bioinformatics datasets, including for genome annotation, can allow us to tailor treatments based on genetic factors. Whilst the appreciation of what AI and ML can and can't do is getting better, the panel drew attention to the challenge of poor data quality and the need for better standardisation and harmonisation to enable the industry to leverage the benefits. Without good quality data and the right to access and use it, the outcomes will be disappointing.

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New Horizons for Biomarker Technologies

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Keynote Presentation



Chris Hodkinson, VP Business Development, Owlstone Medical, talked about addressing two key healthcare challenges using breath-based testing; early disease detection and precision medicine. Chris highlighted the benefits of monitoring disease using biomarkers in breath, such as the non-invasiveness and flexibility of

breath-based monitoring for at-home testing. Additionally, breath biomarkers can provide rich biological information about underlying processes in the whole body, not just respiratory diseases. These advantages are the reason Owlstone Medical has developed innovative diagnostic solutions, including lab-based tests and hand-held devices for liver disease and gastrointestinal disorders.

Company Pitches

The keynote was followed by two company pitches, each presenting exciting and innovative approaches to new therapeutic modalities.



Mark Eccleston, Scientific Advisor for VolitionRx, talked about their platform technology Nu.Q for biomarker identification. From over 15 years of research, the company has created 15 assays targeting post-translational modifications of nucleosomes for early detection and patient monitoring. Examples of applications highlighted were paediatric neuroblastoma and COVID-19.



Jenny Barnett, CEO, Monument Therapeutics, talked about their clinical stage neuroscience focused biotech company aimed at enabling precision medicine using a digital biomarker platform. Monument's lead programme is in schizophrenia, using digital biomarkers to identify subgroups of patients in combination with a nicotinic agonist for treatment. Monument Therapeutics is also developing a lipid-reformulated drug to treat diseases caused by neuroinflammation.

Panel Discussion



Edward Rainsford, Senior Associate, Appleyard Lees, led a panel discussion that took a deeper look into biomarker technologies and associated challenges. The key learnings to emerge were:

Challenges in Biomarker Translation: Proving Utility is of Upmost Importance

Biomarkers face challenges with moving from research settings into clinical practice, largely due to the need for validation to ensure they are reproducible and clinically meaningful. A good example to highlight this is in Alzheimer's disease, where clinical trials once included patients who appeared to have the disease based on symptoms rather than those with confirmed amyloid plaques in the brain. Successful implementation of biomarkers relies on addressing specific clinical needs, such as earlier diagnosis, predicting treatment response, or monitoring disease burden during treatment. To increase adoption, it is important to streamline development by ensuring biomarkers discovered in the early research phase are more valuable downstream, including in clinical trials, through consistent analytical methods.

Technological Advancements

Breakthroughs in technology have enhanced the usefulness and application of biomarkers. For example, smartphones and wearables have become new digital health tools, enabling opportunities for biomarker monitoring. This has been especially useful in fields such as psychiatry, where mental health monitoring by a doctor is less objective. Another area seeing key advances is the liquid biopsy space, especially in detecting and monitoring cancer by identifying DNA markers. A shift is occurring in the pharmaceutical industry where large "blockbuster" drugs are no longer common. Instead, most drug development is focused on more precise markets. These targeted markets are identified through deeper analysis, such as biomarker detection, driving developments in diagnostic capabilities. Such precision medicine approaches are opening up opportunities in many rare disease fields.

The Disparity in Value Between a Diagnostic and a Therapeutic

Compared to therapeutics, the market reward for diagnostic tests utilising biomarkers is less clear, but the risks of a biomarker-based test not being successful are equally high. While diagnostics play a crucial role in enabling early disease detection and improving treatment outcomes, their market value remains significantly lower than that of therapeutic drugs due to limited market and hence lifetime value compared to therapeutics. According to the panel's estimates, the value of a diagnostic is around 1% of the associated drug it supports. Cancer therapeutics that extend patient life tend to attract more investment and recognition than diagnostics within the same space, resulting in fundraising challenges for diagnostic companies. However, companion diagnostics can capture some of this value by being integrated early in clinical development, tracking both efficacy and toxicity.

Regulatory Shifts

While regulatory pathways can pose hurdles in terms of longer timelines and financial burden, particularly for smaller companies, they also present opportunities. The panel discussed the use of biomarkers as surrogate endpoints in clinical trials to expedite drug approval through the FDA's Accelerated Approval Program provided biomarkers are validated. Retrospective biomarker analysis may help avoid the burdens of In Vitro Diagnostic Regulation compliance. Since Brexit, the UK's more flexible regulatory

environment presents fewer barriers. Despite this, selling to the NHS remains difficult. The panel also identified initiatives like the FDA's Project Optimus, which are evolving areas of biomarker use such as drug dosing.

AI Has a Big Role to Play:

We can use AI to revolutionise biomarker technology by leveraging big data, including speeding up the interpretation of complex patient data, to which computers are better suited. For example, where doctors are currently trying to interpret patient symptoms to diagnose and prescribe treatments, AI could outperform this by analysing vast multimodal data more efficiently. However, a significant challenge is getting clinicians to adopt new technologies and integrate them with the data they already use.

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TechBio – Is it Truly Simplifying Complexity?

Using Tech-Bio to Create Value in Bio-Tech

Sciurus Communications guest session write-up



Session Sponsor 

At this year's ON Helix event 'New Horizons for BIO Innovation', a key note session expertly moderated by Precision Life's Rowan Gardner, covered the ins and outs, or ones and zeros, of Tech-Bio. But first, have you protected all your valuable digital data from exfiltration? Is your cybersecurity up to par? A hostile attack leading to extortion and worse, can be just one click anyway, as data security expert Naveen Kaushik from Zenzero demonstrated. In May, United Health confirmed the company paid hackers a \$22m ransom, which led to questioning of the CEO by US Senators.

Assuming you have your data secure, and constantly curated, which Susana Tomasio at CDD Vault can help you with, what can you do with it to crystallise value in a health care setting? Carina Kern at LinkGevity set out how the company, which is redefining our most basic understanding of the ageing process, has its sights firmly set on using data to make a difference in kidney disease, which has accelerated at an alarming rate: up 200% in 30 years. The company has used a novel tech-bio lens for drug repurposing, using an AI-based biological data crunching approach, to find a new class of drug which blocks cell necrosis, in a fraction of the time and budget typically required by experienced drug hunters. Blocking cell necrosis has wider applications in increasing an individual's health span, in areas including tissue engineering, and organ preservation, where innovation is desperately needed, as most patients die waiting for organs, and barely any organs that are harvested are used.



AI can be fundamental in drug repurposing and was used during the pandemic to identify cancer drugs that could be used to treat covid. For marketed drugs there is a wealth of available data that an AI can be tasked with sifting through faster than the eye can follow.

At Nuclera, Cam Watson outlined how they have identified that a major bottleneck in drug development is making enough of a protein to start a project, and transition from a tech-bio digital enabled identification of targets approach to a bio-tech based real world experimental framework. Quick, accurate, production of tiny amounts of protein can provide enough material to explore the biology of a protein suggested by tech-bio as a therapy, with the data generated enabling additional iteration cycles on the path to develop something fit for clinic.

A drug development mantra is to begin with the end in mind. With tech-bio, keep in mind there are powerful players that influence the end game. Especially those who determine reimbursement for a new medicine. Have you factored in the sort of data payors will need to see to say yes and enable patient access to your innovation? Get that right, and with solid data at its core, it's time for tech-bio to soar!

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Translational Research in a Global Village

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Panel Discussion: Learnings from the Boston Bootcamp



In April 2024, One Nucleus delivered a Boston Bootcamp, a competition offering a small group of companies the chance to embark on a funded trip to Boston to gain valuable insights on how to establish traction in this ecosystem; learnings they could later share with their UK peers seeking to explore a similar path as a means to foster a more constructive dialogue between the UK and Greater Boston ecosystem.

ON Helix was chosen as the platform to enable dissemination of the insights gleaned. Ross McNaughton, Partner at Taylor Wessing, one of the Boston Bootcamp sponsors, expertly moderated a panel at ON Helix with the winners of the Bootcamp; Mike Davies (Carcocell Bio), Hazel Jones (Enhanc3D Genomics), Katie Binley (Ikarovec) and Matthew Fyfe (STORM Therapeutics) to discuss their observations from the trip. The headlines to emerge were;

Ecosystem

The Greater Boston ecosystem is vibrant and very concentrated, particularly Kendall Square, referred to as the 'most innovative square mile on the planet'. Over the past 20 years, Boston has transitioned from having one to 18 of the top 20 biopharma companies operating there. The close proximity of leading large Pharma and Biotechs enhances collaboration among scientists, entrepreneurs, and investors. Boston's life sciences ecosystem also thrives due to significant state and federal funding. A good example of this is the Massachusetts Life Sciences Center's (MLSC) ambitious programme to implement a 10-year, \$1 billion state funded investment initiative. Additionally, Boston represents 2% of the US population yet receives 10% of National Institutes of Health (NIH) funding annually, reflecting strong incentives for growth. NIH grants are fully funded, allowing for greater financial backing without the small company taking on equity dilution to match such funding. Since 2005, the ecosystem has successfully tripled the workforce in the sector, supported by policies including tax incentives, infrastructure investment, and talent development.

Operational Challenges

Boston comes with high costs; average wages are three times those in the UK, and real estate is expensive, especially for lab space. However, the impact of this will depend on a company's strategy. For instance, a company may consider opening offices in Boston while moving manufacturing to more affordable areas outside of the centre. Additionally, there are serviced office and lab offerings which provide a cost-effective and flexible solution for start-ups or smaller teams.

Money, Money, Money...

It is no secret that Boston area companies collectively attract huge amounts of venture capital; a significant factor for companies looking to expand there from overseas. During the discussion, all four winners shared their reasons for applying to the Bootcamp, and the common theme was investment opportunities, including STORM Therapeutics aiming for a \$50 million raise. It emerged that compared to the UK, US investors focus on larger,

bolder pitches, typically \$30 to \$40 million and prioritise those at clinical proof of concept. A bolder pitching style aligns with the US culture. Preparation of a clear, confident strategy for growth and relationship building are key to success.

The UK's Competitive Edge...

Part of the Bootcamp's purpose was to make transatlantic collaborations more appealing both ways. It was great to hear that US investors are becoming increasingly active in the UK. This trend is at least partially driven by the high quality of UK science and the cost-effectiveness of R&D operations. In 2023, UK investors participated in over 75% of UK seed deals, and US investors were active in 12% (according to BIA reports). US investors are typically more active around Series A/ B and increasingly active in the UK over the past 5 years. The challenge may lie in whether the scale and pipeline of investments are significant enough for US investors looking for larger-scale opportunities.

Panel Discussion: Connecting Global Innovation



Orestis Tzortzoglou, VP Business Development at BioMed Realty, set the scene for the closing panel with a keynote presentation highlighting the critical role that BioMed Realty plays in providing the infrastructure required to support groundbreaking R&D on a global scale. This includes 16 million square feet of operational real estate in Boston, MA and expansion into Cambridge, UK on parks including Babraham Research Campus, Granta Park, and Cambridge Science Park.

BioMed Realty's deep expertise in navigating local planning laws and regulations is helping to provide more supply in a seamless way across the US and UK. The output of this drives cross-pollination in leasing, providing companies with access to critical equipment and resources, key for growth stage businesses.



Barbara Domayne-Hayman, Entrepreneur-in-Residence at The Francis Crick Institute, facilitated the closing discussion, guiding panellists through a range of topics on the importance of global collaboration in enabling scientific innovation. The panel addressed the challenges and opportunities of international collaboration, and the main topics to emerge were as follows:

Infrastructure

Expected to open in 2027, the MSD Discovery Lab in King's Cross, London, exemplifies the importance of infrastructure for tapping into local talent around the globe. With excellent transport links and access to a wealth of scientific expertise, the lab is well-positioned to drive advancements in neuroscience and immunology. Effective infrastructure, including transport connectivity, is critical for stimulating collaboration, linking local efforts with the broader scientific community.

Learning From Global Innovation Ecosystems

Driving innovation in life sciences requires the right ingredients, including scale, ambition, talent, and funding. When discussing translatable insights from ecosystems outside of the UK, the topic of talent development arose. Successful global innovation ecosystems, like Massachusetts, highlight the importance of good porosity between academia and industry. In 2008, a \$1 billion investment over 10 years was launched to strengthen life sciences and create jobs in Massachusetts, and in 2023 the MassTalent initiative was launched, further prioritising workforce training in life sciences. Similarly, Station F in Paris, also known as the world's largest startup campus, has 30 accelerator programmes and 300 linked VC firms.

Also discussed was the evolution of UK research campus spaces with modern amenities such as leisure facilities to make these locations a destination of choice. This shift, seen as a very US approach, is important for attracting global talent and supporting collaboration.

Regulation and Reimbursement

Innovating in life sciences on a global scale can present challenges due to diverse frameworks on regulatory and reimbursement systems across countries. While regulatory requirements all focus on safety and efficacy, there are often nuanced differences in how various regulatory bodies treat data. Reimbursement approval relies on demonstrating added value over existing treatments, leading to divergence in how countries prioritise therapeutic efficacy versus cost-effectiveness. Although there is some degree of collaboration (e.g., commonality around health technology assessments), these differing priorities create complexities. To navigate these challenges, life sciences companies need to think globally about their evidence generation for regulatory bodies and payors, preferably at the proof-of-concept stage.

Call for Government Support

The panel discussion concluded with a call for government support to reinforce the UK's global competitiveness in life science innovation. This included the need for increased financial support, particularly at the academic base, to fuel innovative research and a reassessment of regulatory processes (e.g. NICE) to reduce adversarial barriers to market.

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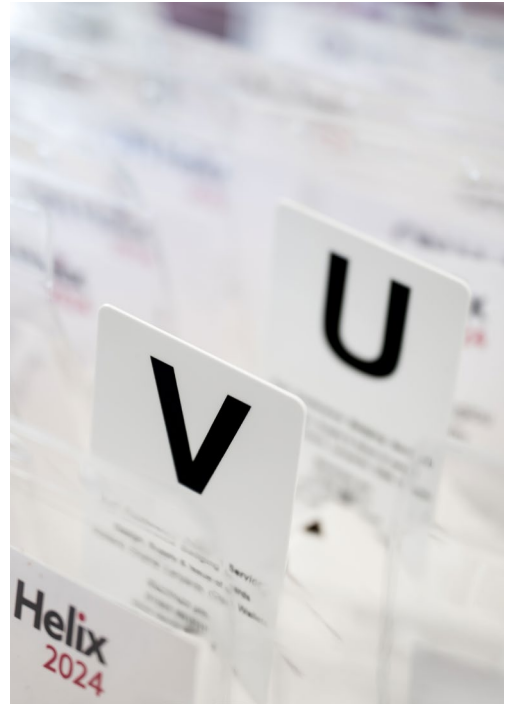


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ON Helix 2024 Exhibitors

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ON Helix Fringe: Online and In-Person

The ON Helix Fringe is a series of separate seminars and receptions across Cambridge that occur in the days around the main ON Helix conference day.

Attended by those attending ON Helix and non-attendees, the Fringe events add depth to the content and networking opportunities available to visitors.

Milner Pitch Event and Milner Therapeutics Symposium 2024

Precision Medicine in Chronic Diseases: Increase R&D Success with Causal AI

Celerion Fringe Event on Biomarkers and Therapeutic Development

Practical Engineering Insights for Pharma and Bio Leaders

One Nucleus Summer Life Sciences Dinner

The Advantages of the Cambridge Ecosystem: Stories of Discovery, Collaboration and Innovation with CONEXEN (Connect – Exchange – Engage)

Delivering the ON Helix Fringe Sessions were:

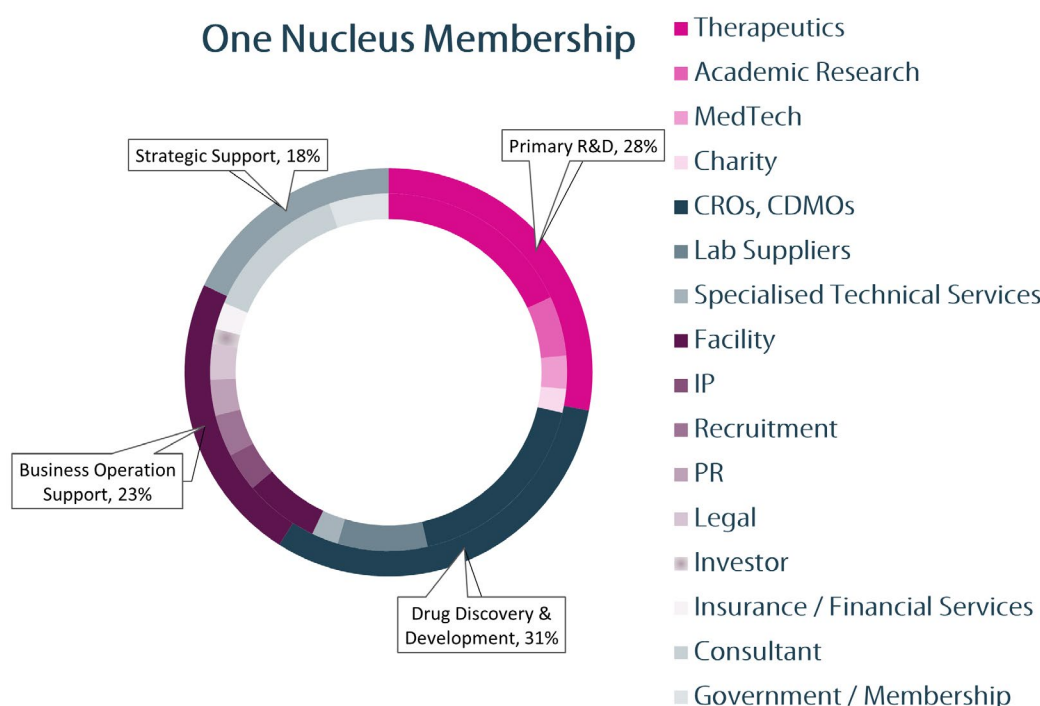


About One Nucleus

One Nucleus is a not-for-profit Life Sciences & Healthcare membership organisation headquartered in Cambridge, UK. We support institutions, companies and individuals in the Life Sciences sector providing local, UK-wide and international connectivity.

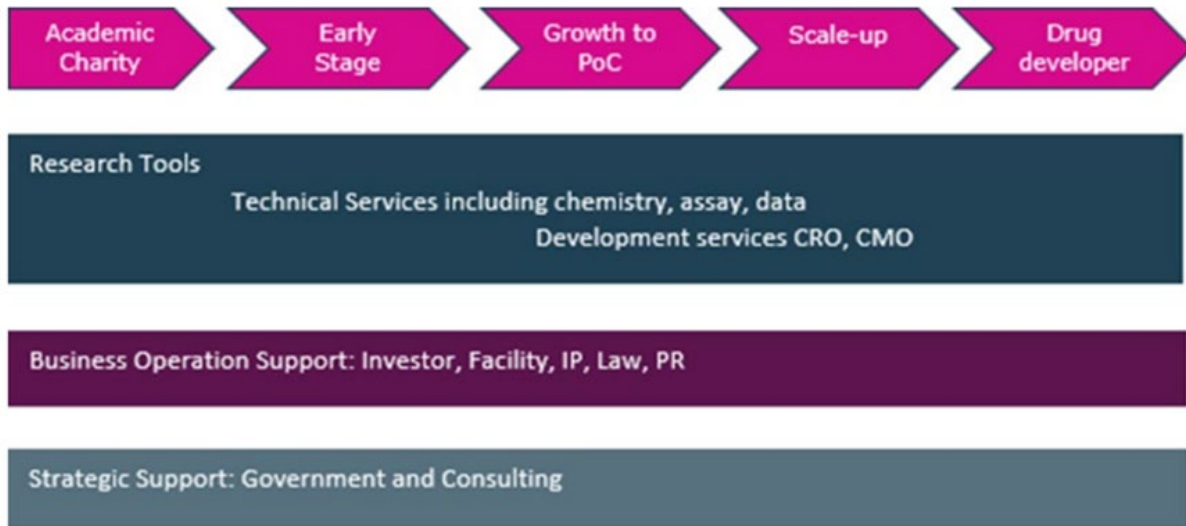
One Nucleus' mission is to bring the right people together to exchange knowledge and collaborate to enable the translation of great innovation into great products that markedly improve patient outcomes. Attracting and enabling the best people to engage is at the heart of what we do and what we continually strive to deliver.

One Nucleus members are concentrated (~70%) in the Greater Cambridge (East of England) and Greater London clusters. The One Nucleus membership base is diverse and represents the full breadth of the Life Science sector, each playing vital roles in the creation, protection, investment, infrastructure and accommodation of an ecosystem responsible for translating world class invention and innovation into patient benefit, economic development and returns on investment.



One Nucleus is committed to highlighting the crucial role that each component of the sector plays within the Life Science value chain. The value chain ranges from academic research to large drug developers and all stages and model of company in-between. Developing new health interventions requires technical services, business support and strategic support to enable innovation, scalability and success.

Accelerating the speed and efficiency of traversing the process from ideation to patient, as represented on the next page, is the mutual goal of both One Nucleus our members and our collaborators.



One Nucleus as a Virtual Innovation Centre (VIC)

One Nucleus provides support to the Life Science ecosystem in key areas that are critical for innovation being translated into successful businesses, products and services. Delivery of such support can best be broadly conceptualised as One Nucleus acting as a virtual innovation centre. Unlike a traditional innovation centre, where the breadth and depth of the ecosystem and physical capacity is a factor, viewing One Nucleus as an innovation centre without walls encapsulates the immense spread of complementary excellence One Nucleus is able to facilitate access to for our members.

VIRTUAL INNOVATION VIA ONE NUCLEUS

Mapping Your Way to Good Advice Early



One Nucleus acts as a comprehensive 'Sat Nav' to experts who can advise on the dynamic challenges that innovators face throughout their translational research and business creation journey, all the way from their initial ideas to exit.

One Nucleus' innovation support is delivered in a variety of forms through our Innovation Seminars, Events and Conferences, which offer comprehensive peer-to-peer knowledge-exchange alongside operational support services around Savings, Learning & Development and Facilities Consultancy.

Key Services for Our Members

The diagram and text below outline the main elements of One Nucleus support included in One Nucleus membership.



- Raise Your Profile

One Nucleus members benefit from enhanced visibility to their target audience and from the opportunity to be seen in our network alongside other members. We do this through our online directory listing, website and social media channels, newsletters and speaker opportunities at our events.

- Connect with Our Network

A key advantage to any company joining One Nucleus is the ability to connect with your next potential partner, client or investor. Our diverse range of events and conferences is a key tool for enabling these interactions.

- Build the Best Teams

We help our members to develop and grow their teams through our focussed Life Science training portfolio (offered to members at a discount), Lunch & Learn series, Building Life Science Adventures (BLSA) special interest group, mentoring initiative and One Nucleus jobs page. The One Nucleus Training Sat Nav is the most recent initiative that One Nucleus has created to help life science companies identify training opportunities for staff efficiently.

- Discounts for Members

One Nucleus members make significant savings through a Group Purchasing Scheme and Member-to-Member Marketplace, as well as numerous discounts across third party conferences and member discounts on facility management.

- Finding and Running a Lab

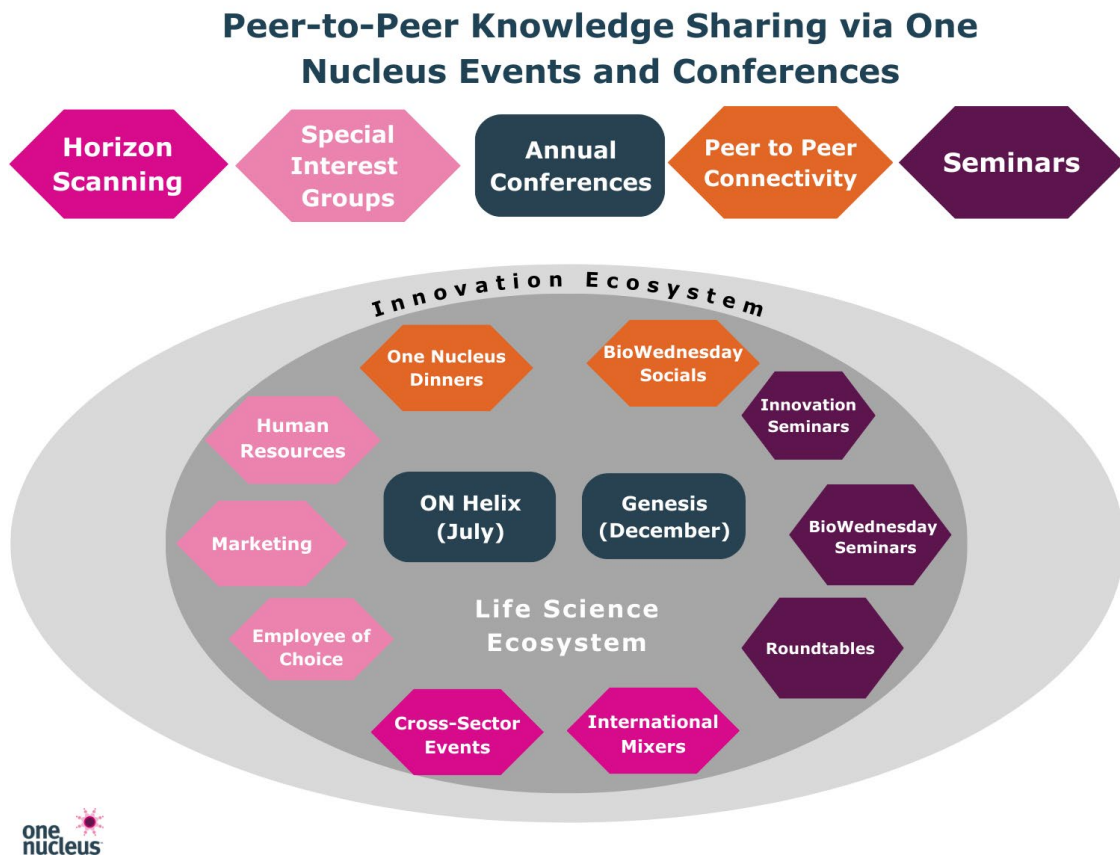
We support our members with their innovation by reducing the cost on fit outs and related services, as well as saving them time on finding the right lab space.

- Access Innovation Support

We help our members to become operational in areas such as raising investment, building partnerships, recruitment, establishing facilities or accessing business support by providing access to the right experts, further resources and One Nucleus services.



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



The portfolio of One Nucleus events is completely structured around encouraging the key conversations, meetings and knowledge-sharing that enables deal flow whether those deals are investment, R&D collaborations, service procurement, recruitment or other. Membership is the most efficient and cost-effective option to engage with our network via our events.

Conferences: The focal points of the One Nucleus calendar are our Genesis and ON Helix conferences. With discounted rates for members to attend, these larger events are an ideal opportunity to contribute, raise profile, and network at scale with the One Nucleus ecosystem.

Seminars: These may be built in partnership with third parties or One Nucleus led. They can include a mix of presentations and/or debate around key technical or business challenges in the sector. These sessions are often free to attend and may be invite only, apart from our BioWednesdays which are free to One Nucleus members and chargeable to non-members.

Peer-to-Peer Connectivity: Our Regional Life Science dinners started in 2022 and have demonstrated a very successful track record of bringing a targeted group together for informal networking to nurture relationships. Our BioWednesday Socials are an opportunity for members and non-members to come together to network, often in the bar where many new ideas are forged!

Special Interest Groups: Our SIGs enable peer-to-peer interactions on topics such as HR, Marketing, BLSA and Employer of Choice. They are an ideal opportunity to connect with those in similar roles to discuss solutions to shared challenges and stay up-to-date on current regulation. Discounted to members.

Horizon Scanning: Facilitating the convergence of our network with complementary networks from related technology fields or different geographies is an effective means to help our members build those all-important new relationships. One Nucleus maintains strong collaborative relationships with a multitude of such groups, both across the UK and internationally.

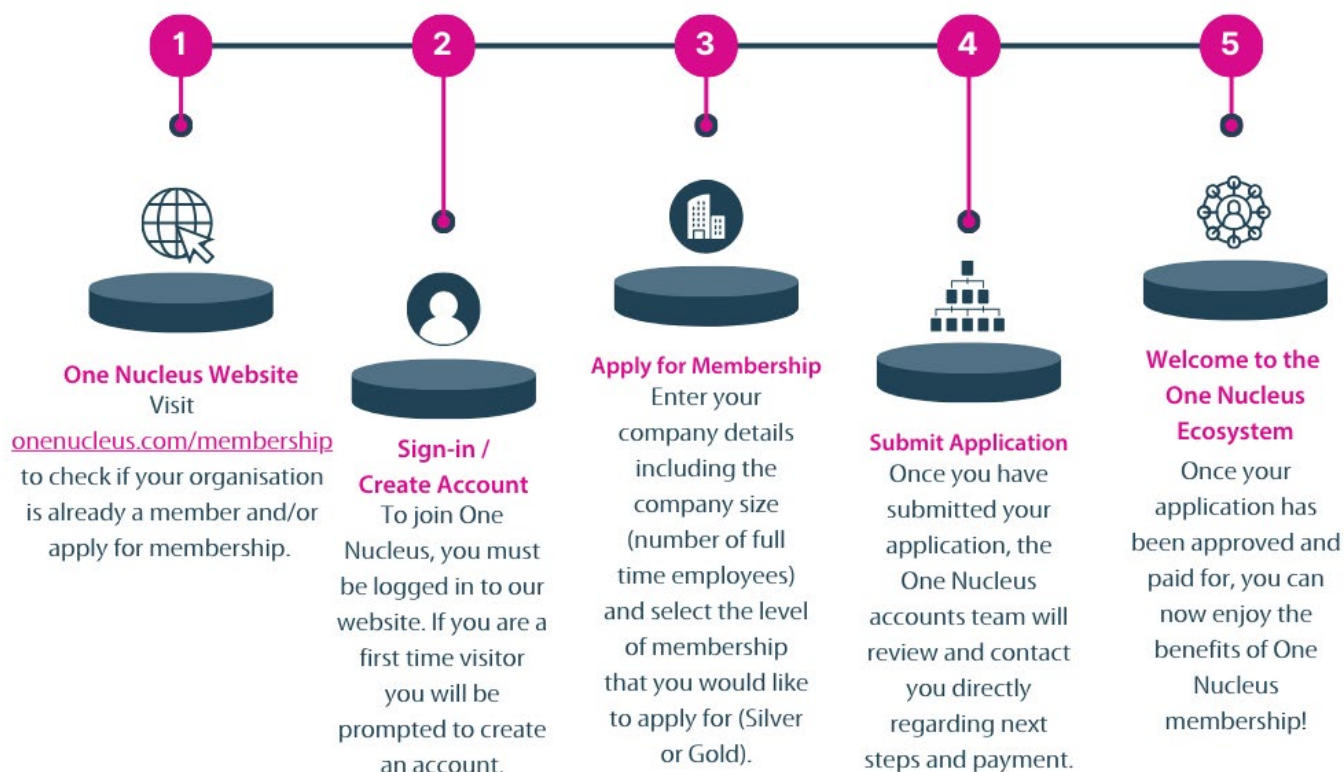


One Nucleus Membership Benefits

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 ON Helix/ Genesis Review	£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	£50+VAT	✓	✓
Innovation Seminars	Invitation Only	✓	✓
Services			
Training	✓	15% Discount	30% Discount
Facilities Management Consultancy Day Rate*	£1,155+VAT	£980+VAT	£810+VAT
Preferred Supplier Discounts	✗	✓**	✓
Access M2M Marketplace Discounts	✗	✓	✓
Access to Special Interest Groups	£50+VAT	£30+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			

Become a One Nucleus Member

Along with bespoke Corporate Sponsorship and Partner packages, we offer two levels of membership – Silver and Gold. Silver Members receive a range of entry-level benefits. Gold Members enjoy an enhanced range of exclusive services and benefits. Follow these five simple steps to become a One Nucleus member...



Find The Right Course for You and Your Team With Our Sat Nav

FIND THE RIGHT COURSE FOR YOU AND YOUR TEAM WITH OUR

ONE NUCLEUS TRAINING SAT NAV

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One Nucleus Boston Bootcamp 2025



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The Boston Bootcamp is a competition aimed at supporting One Nucleus member companies looking to understand and engage with the Massachusetts Life Science ecosystem. Felt by many to be the leading innovation location in the world, the Greater Boston Cluster is a key target for most One Nucleus members seeking investment, deal flow and growth. Continuing to build on very positive One Nucleus relationships with numerous MA-based collaborators, the annual bootcamp seeks to:

- Immerse the winning companies in the Boston ecosystem for US readiness insights
- Feedback the key learnings gained by the winners to the wider One Nucleus network to benefit all
- Build on the One Nucleus – Boston connections and collaborations to support further One Nucleus members in accessing US opportunities
- Promote two-way deal flow, having showcased examples of what the UK has to offer MA-based businesses and investors.

The Prize



- Return Premium Economy Flights LHR-BOS
- 3 nights hotel accommodation
- UK preparatory sessions with experts of Greater Boston experience
- Participation in the Boston Bootcamp on 28 April–1 May 2025
- Free delegate place at the One Nucleus Annual Awards Dinner 2025
- Participation in a keynote panel session at ON Helix 2025

To read more about the additional One Nucleus activities in Boston and beyond, check out the blog series at <https://onenucleus.com/blog>

The Programme: Topics Covered Across the Sessions Include:

Introduction to MA Ecosystem • An overview of the MA Life Sciences sector • How to navigate the ecosystem • Support available to UK companies seeking to do business in MA	Operational Strategies • Corporate Structure • Facilities leasing • Building your leadership team • Intellectual Property strategy • Reporting compliance
Investment and M&A Activity • Financing landscape • Business model and value proposition • Terms sheets • Due diligence	R&D Collaboration, Support, and Strategy • Identifying the correct partners • Accessing non-dilutive funding • Working with academia • Undertaking Clinical Trials

Key Dates:

- 5 December 2024 - Competition Launch
- 21 January 2025 - Meet the Class of '24 Reception
- 7 February 2025 - Competition Entries Close
- 20 February 2025 – Presentation Day to Judges (online)
- 25 February 2025 – Winners Announced
- March 2025 - Pre-Bootcamp Sessions
- 27 March 2025 - One Nucleus Awards Dinner
- 28 April – 1 May 2025 - Bootcamp Dates in Boston, MA
- 3 July 2025 – Winners Feedback at ON Helix Conference

Entry Criteria:

- Developing an innovative new therapeutic product or discovery platform
- An incorporated entity
- A One Nucleus Member
- Ambition to engage with MA ecosystem

The 2024 Winners



Left: The One Nucleus Boston Bootcamp travelling group with then UK Consul-General to New England, Peter Abbott OBE, and members of the organising group

Centre: The winners showcased at the One Nucleus Annual Awards Dinner 2024

Right: The winners feedback panel at ON Helix 2024 with Ross McNaughton (Taylor Wessing), Katie Binley (Ikarovec), Hazel Jones (Enhanc3D Genomics), Mike Davies (Carocell Bio and Matthew Fyfe (STORM Therapeutics)



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Annual Awards 2025

Awards Dinner 27 March 2025 | London, UK

200

Exclusive attendees
celebrating achievements
in our ecosystem

8 Awards

Recognising all
stakeholders

Innovation Equity

Accessible, Inclusive,
Sustainable Solutions

Following the success of this year's Awards, with feedback indicating it brought something new and inclusive to the ecosystem, One Nucleus is delighted to announce our Annual Awards 2025. The continued success of the Life Sciences sector is built on the excellence of all its stakeholders, hence One Nucleus feels we should celebrate by recognising all parts of our community, including life science innovators, R&D companies, non-profit organisations, technical providers, and professional advisors. Recognition of everyone's valuable contribution to improving patient outcomes is reflected in the breadth of the eight open categories. Nominate your own company or indeed someone else you feel deserves celebrating.

The One Nucleus Award categories are structured to reflect that breadth of R&D, investment, service provision, and enabling support across the entire One Nucleus ecosystem. "Performance of the Year" being recognised in each category as follows:

- Therapeutic Discovery Company
- R&D Platform Development Company
- New Company Creator
- R&D Services Provider
- Professional Services Company
- R&D Facility Development
- Non-Profit Research Organisation
- Most Creative Investor

Good luck to all the entrants!

Visit www.onenucleusawards.com



Genesis 2024

Maximising Returns from Life Science Innovation

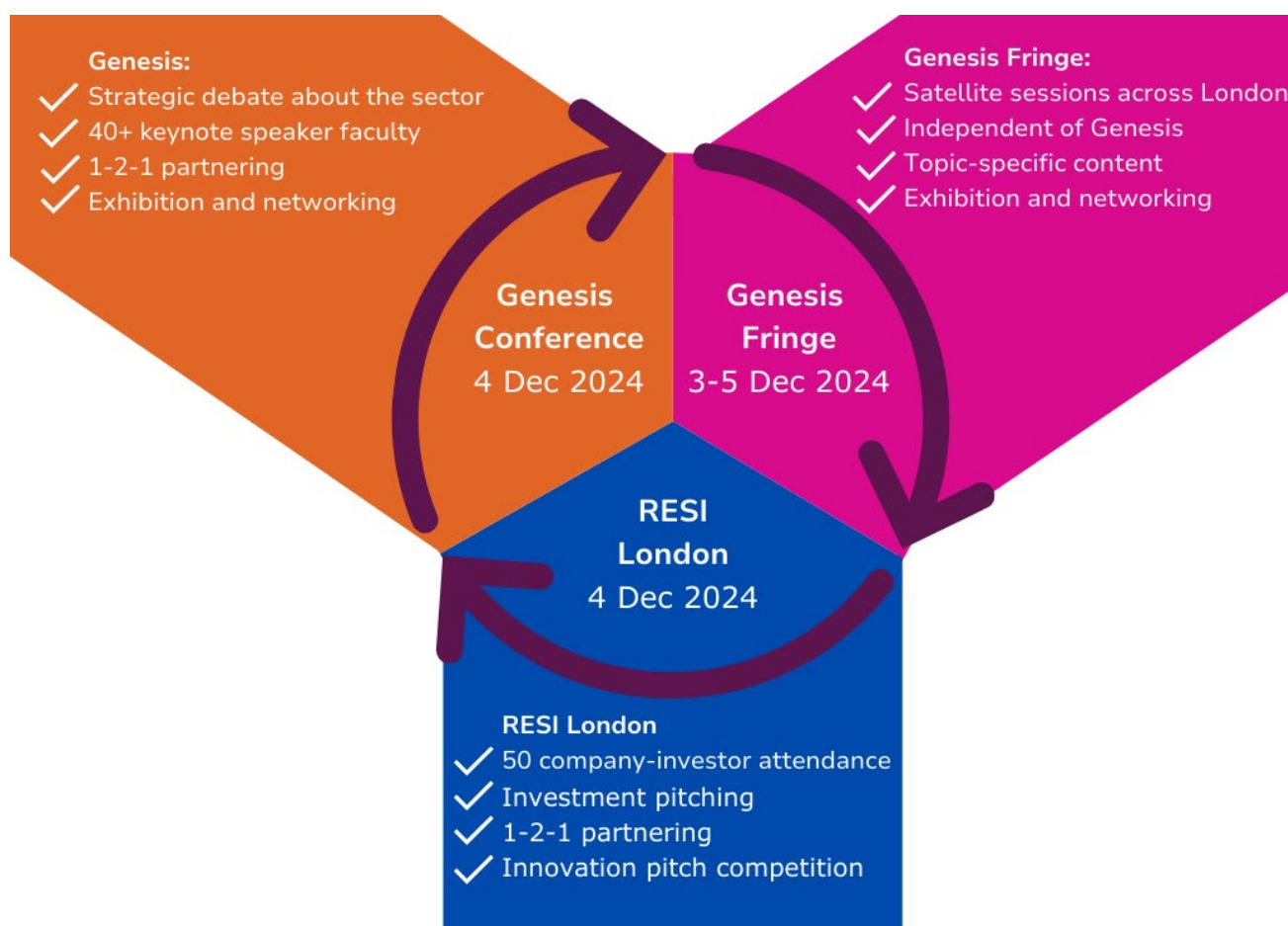
📍 1 Wimpole Street, London

📅 4 December 2024



For over two decades, the annual Genesis conference has brought key life science opinion leaders and stakeholders together to debate current trends, challenges, and solutions, along with best practices in how to address them. The conference acts as an anchor around which others coalesce, adding to the networking opportunities, and knowledge sharing to instigate new alliances and developments as the ecosystem collectively addresses three main aspects:

- **Where are we and where are we going?**
- **How do we get there?**
- **Who will invest to make it happen?**



Visit www.genesisconference.com for further information.

New Horizons for Bio Innovation

ON Helix offers a high content mix of plenary talks and panels from key opinion leaders; 1-2-1 Partnering; an Exhibition assembling an array of providers supporting the life science sector; and ample networking opportunities.

As the Life Science sector constantly evolves, introducing new methods to develop treatments and therapies for improved patient outcomes, new translational challenges arise that require collective input to address. The annual ON Helix conference explores the key R&D developments helping to guide the advancement of research and technology to deliver on the sector's vision of better patient treatments for all.

Visit www.onhelix.com



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See You at the Next **ON Helix** - 3 July 2025





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