Consultation submission

7 February 2025

UK BioIndustry Association

BIA submission: Spending Review

About the BIA

The BioIndustry Association (BIA) is the voice of the innovative life sciences and biotech industry, enabling and connecting the UK ecosystem so that businesses can start, grow and deliver world changing innovation. Our 600+ members include start-ups, biotechnology and innovative life science companies, large pharmaceutical companies, universities, research centres, tech transfer offices, incubators and accelerators, and a wide range of life science service providers: investors, lawyers and IP consultants. The BIA is a formal member of the UK Life Science Council and a founding partner of the UK Vaccines Taskforce during the pandemic. We promote an ecosystem that enables innovative life science companies to start and grow successfully and sustainably.

The growth potential of the life science sector

The UK's R&D-intensive life sciences and biotech sector is universally recognised as world-leading, delivering significant benefits to the economy, and the health of the nation. It is key to the government's growth mission, as well as its ambition for clean energy and building an NHS fit for the future. From improving patients' lives through new treatments and digital healthcare, we are now seeing biotechnologies transform other industries, from farming, travel, and fashion, to the development of environmentally sustainable technologies – including fossil fuel substitutes, biodegradable bioplastics and the cleaning of polluted waters. The pace of innovation is increasing and where steam and computing came to define their eras, now biology is changing the world, helping to address both humankind's greatest challenges and Labour's priorities for Britain.

The government's identification of the life sciences as a priority sector of growth – as outlined in the Industrial Strategy – is both welcome, and well founded. As the Chancellor has said: 'We are at the forefront of some of the most exciting developments in the world, like artificial intelligence and life sciences'[1]

This is a growing sector of the future that poses unique opportunity. The UK life sciences industry employs over 300,000 people, with approximately 5% jobs growth per year, and around two-thirds of these jobs are outside London and the South East. There are 6,850 life sciences businesses, 75% of which are SMEs, and combined they generate a turnover of £108.1bn.[2] The average GVA per employee is over twice the UK average at £104,000 and the sector consistently invests more in R&D than any other (£9 billion in 2022).[3]

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[1] HMT, The Rt Hon Rachel Reeves MP: How the UK will kickstart growth. (2025)
[2] DSIT, DHSC, OLS: Bioscience and health technology sector statistics 2021 to 2022. (2023)
[3] ONS: Business enterprise research and development, UK: 2022. (2024)

The UK benefits from a diverse ecosystem of large and small life science companies, and it is important to implement policies to support companies of all sizes, from ensuring there is an attractive commercial environment for companies providing medicines and technologies to the NHS, to investing in the earliest stages of innovation within universities and supporting company creation and scale-up.

Start-ups and scale-ups are of critical importance to the sector. They represented 65% of the global drug development pipeline in 2021, with an additional 7% being developed by them in partnership with larger firms.[4] These high-growth innovate SMEs are a UK strength, attracting record levels of equity investment and overseas investors. The sector achieved significant growth in 2024, raising £3.5 billion in equity investment—a 94% increase compared to the previous year.[5] This represents the highest annual figure since the £4.5 billion raised in 2021 and is a testament to the sector's resilience, innovation, and global appeal, even in the face of challenging economic conditions.

These encouraging figures will be bolstered by the government's support of the sector. Beyond the designation of the life sciences as a priority sector, the recent announcement from the Chancellor that R&D tax reliefs will be supported throughout the entirety of Parliament was of crucial importance. Considering how instrumental they are for large and small life science companies; the reliefs are a core policy that – as part of broader industrial strategies – has led to the UK enjoying its position as one of the leading life sciences powerhouses globally.

Similarly, the Chancellor‘s commitment to pension fund reform to increase investment in UK equities and growth industries is hugely welcome, and is the first step in addressing one of the most significant barriers faced by the sector – access to scale-up finance.

It is clear, therefore, that the UK life sciences sector is one of significant potential that is in part already being realised, and that proactive government intervention can have a marked impact on just how much of this potential is delivered to the UK.

However, much work remains to be done, and the sector faces substantial barriers that must be addressed to allow it to flourish. One of the biggest challenges faced is accessing capital. Due to the long R&D timelines, high risk and cutting-edge nature of life sciences and biotech, the sector is more dependent on venture capital than almost all others. Businesses must raise multiple, successive rounds of venture capital, with the total amount needing to be raised to develop a single new medicine ranging from about £1 billion.

[4] IQVIA: Emerging biopharma's contribution to innovation. (2024).
[5] BIA: UK biotech financing 2024. (2025)

Despite this need, and recent positive investment data, the British Business Bank showed in their latest Equity Tracker report that the UK still under-invests in life sciences venture capital more than any other sector when compared to the US. Even though we are widely recognised as world-leading in life sciences and the clear leader in Europe, accounting for a third of all life sciences venture investment across the continent, there is a clear market failure demonstrated by the British Business Bank's data: UK investors do not want to invest in UK life sciences. However, the quality of UK life sciences and the companies is not at fault, as they attract a disproportionate number of expert US investors (33% of seed deals are led by US investors, and 47% of Series A deals[6]). Considerable work is needed then, to address this market failure, and ensure that companies are able to access the capital they need to scale and deliver.

If government is able to overcome this obstacle – attracting and unlocking late-stage capital to build bigger, more valuable companies – other benefits will follow. A broader, longer-term capital base will help draw more skilled individuals to the UK, and we encourage specific measures to nurture our home-grown skills base and attract international talent. Beyond capital, solidifying the UK's international standing will requires us to improve the commercial environment for life sciences and double down on our strengths. Government should leverage UK biotech's unique advantages – including burgeoning AI-powered techbio innovation, growing manufacturing infrastructure, a digitalising NHS and globally recognised regulatory expertise – to bolster our reputation within the international life sciences ecosystem.

By focusing on a few core areas – continuing to improve what we already do well, believing in the strength of the UK sector, and driving investment from both domestic and international sources – we can create an even stronger, faster-growing, and more resilient sector, better placed to deliver economic growth to the UK. The realisation of such a sector would bring far more than economic growth alone. UK life science is already delivering world-leading and world-saving innovations, from vaccines able to stop a global pandemic in its tracks, to new frontiers of green technology confronting a rapidly heating planet. It is an asset to both the UK and the world at large, and if we are able to unlock its full potential, the impact will resonate across the government's missions, delivering unprecedented benefits to society.

Introduction and summary of our submission

As outlined in the Industrial Strategy green paper, unlocking the potential of our growth-driving sector and creating a pro-business environment is a task that can be distilled to a focus on six key areas. Directing spend and resource to these areas will create an ecosystem that supports both the expansion and creation of UK life science companies, driving growth now, and setting the stage for increasing returns in future.

[6] BIA: UK biotech financing 2024. (2025)

The six areas within the Industrial Strategy green paper and our Spending Review priority investments within them are:

- **Innovation**
  Sustained public and private investment in research and development (R&D) and adoption of innovation is critical to maintaining the UK's leadership in life sciences. Strategic investment through UKRI and Innovate UK into high-growth technologies and subsectors is key to unlocking the economic growth of the sector, as well as ensuring that companies are able to scale and commercialise.

- **Crowding in investment**
  The life science sector is more dependent on globally mobile venture capital and R&D/manufacturing investments than almost all others. The UK lacks its own venture capital funds sufficient scale required to support the growth of innovative businesses, despite high levels of foreign investment, and the commercial environment to attract and retain valuable commercial manufacturing operations. A focus is needed on increasing the number of domestic investors, particularly large institutions like pension funds, and it is crucial that the UK isn't outcompeted by international competitors willing to offer more incentives to crowd in globally-mobile investment.

- **Regulatory environment**
  Life sciences and biotech companies operate in highly regulated markets. Highly-innovative products developed and produced by the sector bring great benefits to society, create new industries, jobs and export-led growth, but they can only deliver these benefits if regulators are properly resourced, and supportive of innovation.

- **People and skills**
  Over 50% of the life sciences workforce holds advanced technical qualifications, making funding for relevant qualifications, and industry and SME engagement, essential to meet workforce demands. An efficient and easy to navigate visa regime is also essential and we welcome the Chancellor's recent remarks on enabling this for life sciences and AI.

- **International partnerships and trade**
  The UK's life sciences sector is truly global. R&D, business, and investment partnerships between trusted international partners are a regular occurrence and critical to the functioning of the sector. The expansion of our investor "concierge" service is needed to offer more holistic support for investors, and government-facilitated trade missions should continue to build and bolster international connections, where there is significant opportunity for reform.

- **Energy and infrastructure**
  Access to specialised infrastructure and manufacturing capacity is needed to enable the UK to scale-up and capture the economic benefits of advanced manufacturing medicines and bio-based innovations in growth industries being transformed by biotech. Investment into digital infrastructure can future-proof the sector, as well as investment into traditional infrastructure and transport to enable connections and growth.

Our submission to the Spending Review focuses on the broad needs of these key areas. The BIA is closely involved in the development of the Industrial Strategy, the NHS 10-year plan, and Life Sciences Sector Plan. Many of the specific projects that will require backing and resource in the Spending Review will arise from this process – which has not yet concluded. As such, this submission only outlines the broad requirements for the six areas. We would welcome further opportunities for discussions with HM Treasury on the Sector Plan as it is developed.

Our submission to the Industrial Strategy consultation[7], and our submission to the UK Trade Strategy consultation[8] offers a more granular view of the challenges and needs of the sector through the lens of these six areas.

Innovation

Relevant budgets

- Department for Science, Innovation and Technology – UKRI/Innovate UK
- Office for Life Sciences
- Department of Health and Social Care – NIHR and NHS

The breadth, depth, and strength of UK life sciences means we have opportunities throughout many, if not all, of the subsectors and technologies across the sector as a whole. Increased investment into the sector generally will provide substantial returns to the UK at large. However, some of the subsectors are more nascent than others, and it is at this cutting edge that the UK can take advantage of lower levels of international competition to capture significant market share in future growth subsectors/technologies, if government spending is astutely targeted.

Strategic investment into high-growth technologies and subsectors will generate the greatest returns, these include:

- Genomics and functional genomics
- AI and techbio
- Precision medicine
- Cell and gene therapies

[7] BIA: BIA response to Invest 2035: The UK's modern industrial strategy. (2024)
[8] BIA: BIA response to UK Trade Strategy. (2025)

- Innovative manufacturing processes
- Engineering biology and deep biotech

An ecosystem that allows advances in these areas to flourish is key to unlocking the growth potential of the sector. Government investment alongside targeted incentives to stimulate private investment will be essential. The commitment from the Chancellor that R&D tax relief will remain at its current level for the duration of Parliament is an excellent demonstration of this support, and a key component of the pro-innovation, pro-investment tax regime that will allow the sector to thrive.

Start-ups and scale-ups are of critical importance to the life sciences and biotech sector. For example, they represented 65% of the global drug development pipeline in 2021, with an additional 7% being developed by them in partnership with larger firms.[9] Despite this outsized contribution, start-ups and scale-ups face the greatest barriers to growth, and therefore need special consideration and targeted support.

UKRI/Innovate UK

Start-ups and scale-ups are also an important route to commercialisation – the process through which the UK realises the large economic, social, environmental and health benefits of our world-leading R&D and innovation. Mechanisms that provide financial support to these early-stage companies need to be adequately resourced, for example Innovate UK and its Biomedical Catalyst, which has an estimated leverage ratio was between £3.99 and £5.09 per £1 of public spending.[10] Similarly, recommendations from the independent review of UK university spinouts,[11] should be implemented including increased UKRI funding for the proof-of-concept stage.

Much of the responsibility for supporting innovation and scale-up lies with DSIT, and DBT. Both agencies directly fund institutions that are essential for innovation – UKRI/Innovate UK for DSIT, and British Business Bank and British Patient Capital via DBT. It follows, therefore, that adequately funding both departments and ensuring strategic link-up and a continuous chain of support from their agencies is essential to unlocking the economic potential of UK innovation.

R&D tax relief

Grant funding is complemented by the UK's R&D tax relief regime, which provides dependable support for the sector. R&D tax credits, introduced by the Labour government in 2000, have been critical to the growth and success of UK life sciences and biotech. BIA members regularly cite them as the most important support they receive from government. Crucially for pre-revenue companies, they reduce the cost of investing in R&D with cash payments, so that the level of

[9] IQVIA: Emerging biopharma's contribution to innovation. (2024).
[10] Ipsos MORI: Biomedical Catalyst evaluation report (2017)
[11] DSIT, HMT: Government response: Independent review of university spin-outs. (2023)

investment required is more proportionate to the level of risk, thus incentivising private (often venture capital) investment into start-ups and scale-ups.

We very much welcome the Chancellor's recent commitment that the rates of relief will be maintained throughout Parliament. Government should now focus on ensuring that the scheme is running as smoothly and effectively as possible. A thorough review of the schemes using a better, more comprehensive evidence base and industry consultation – as outlined by the BIA[12] – will allow government to tailor the R&D tax credit scheme to increase private investment and economic growth. Once the scheme is functioning to its fullest potential, the strength of the UK's offer in this area should be made known to the global investment community to attract them to UK shores. Moreover, as fraud is cut and the scheme better targeted, the cost of the scheme to the Exchequer will go down, which could allow for the R&D-intensive SME rate to be returned to it's original levels of 33p/£.

Horizon Europe

The UK's association with Horizon Europe has been beneficial for the UK's science and innovation ecosystem, both as a source of grant funding for early-stage companies and the wider collaboration it enables for UK researchers. However, the schemes are traditionally hard to navigate and access compared to Innovate UK schemes, so the government's focus on supporting companies to apply is important to be continued. Moreover, UK companies are locked out of the equity funding competitions of the framework, which complement grant funding. As part of the negotiations with the EU, the UK should seek an innovation agreement to complement the science deal, enabling IP created to be developed in the UK by UK-based firms, which are otherwise forced to move overseas. This should be looked at with urgency for any negative impact it is having on UK companies and their ability to stay and scale in the UK.

Health data assets

Access to high quality health data is vital to the success of small and scaling companies across the sector, and their ability to contribute to health and efficiency improvements within the NHS and deliver economic growth in the UK through job and wealth creation. A vibrant ecosystem of UK based businesses contributing innovative solutions to, and in collaboration with the NHS, will provide the best opportunity for new products that will benefit the NHS and its patients, as well as attract global R&D investment into the UK.

However, UK data custodians are not involving industry or enabling profit for the public good, nor are they providing an equal playing field when it comes to data access and procurement. More broadly it's apparent that the need to support UK industry and cutting-edge innovation is not embedded in all data custodians' thinking and strategies.

[12] BIA: Improving the evidence base for R&D tax relief in the life sciences sector. (2024)

Government should have increased oversight of UK Biobank and Our Future Health, alongside the NHS data for R&D programme, the UK ensure they are operating in a manner consistent with delivering UK growth and innovation, responding to current and future user needs, and ultimately supporting as many UK companies as possible via their data access processes, access fees and tendering processes. Finally, to ensure that these data assets are an effective part of the industrial strategy, we are calling for adequate, strategic, long-term funding.

Clinical trials

Another enabler of innovation within life sciences is the clinical trial infrastructure and regulatory system. However, the UK has been falling behind in its commercial clinical trials activity in recent years, with a 44% drop in the number of patients enrolled onto commercially-led studies[13].
The Lord O'Shaughnessy independent review[14], set out recommendations to improve the environment for commercial clinical trials. Some progress has been made in implementing the recommendations, but it is necessary to maintain momentum so that outstanding issues are addressed. For example, reformation of the process for planning and delivering trials is needed to increase accessibility and efficiency, and it is likely that digital methods will be necessary. What's more, portfolio management should move to a more proactive model, and embed a culture of R&D and innovation across the healthcare system.

Crowding in investment

Relevant budgets

- Department for Business and Trade – British Business Bank/British Patient Capital
- Department for Work and Pensions
- Office for Investment
- Office for Life Sciences

Crowding in growth capital

Despite the UK's position as a global leader in the life sciences, it lags behind the US with regard to the levels of domestic venture capital able to support the growth of innovative businesses. The British Business Bank's latest Equity Tracker showed the US life sciences sector raises 59% more investment relative to GDP than the UK sector, and that this is the biggest sectoral funding gap seen in British venture capital.[15] The BBB's data also showed that UK life sciences is the only R&D-intensive UK sector that has not increased its market share of global venture investment over the last ten years.

[13] ABPI: Rescuing patient access to industrial clinical trials in the UK. (2022)
[14] DHSC, OLS, DSIT: Commercial clinical trials in the UK: the Lord O'Shaughnessy review - final report. (2023)
[15] British Business Bank: Small Business Equity Tracker 2024. (2024).

Both BIA and BBB data shows seed funding for UK life sciences is relatively healthy, with levels comparable to the US.[16,17] This is in part due to government schemes such as SEIS, EIS, VCT, and robust R&D tax reliefs, as well as actions and initiatives from the British Business Bank (BBB). However, early and late-stage VC (Series B+/£20m+) deals are where the gap opens up. Data from both the BIA and the British Venture Capital Association (BVCA) shows that investment at these stages – critical for scaling a business – is predominantly coming from foreign investors, particularly American ones.[18,19] This is a vulnerability for our domestic sector as it creates an incentive to move closer to where the investors are (usually the US) and means value is not being captured in the UK.

A lack of domestic venture capital investment into UK life sciences is not an indication of the quality of the companies or innovations themselves. Our ability to attract significant foreign investment is a testament to that quality, and work is needed to ensure that domestic capital is funneled into growth companies and economic returns captured at home.

In order to retain value and drive further growth, a focus is needed on increasing the number of domestic investors, particularly large institutions like pension funds. The Mansions House Compact is a significant step forward in this regard, and work must continue to channel the considerable capital from pension funds into innovative UK businesses. This agenda should be built upon by motivating a broader set of institutional investors (i.e. not just the eleven Compact signatories) into taking action, and with a greater focus on UK equities. Of course, full pension reform will take many years and additional, more immediate, measures should be undertaken. These include the requirement of UK-based institutional investors to disclose their allocations into UK equities across their portfolios, in addition to encouraging the disclosure of investments into unlisted equities, and into each of the eight growth-driving sectors of the Industrial Strategy. The significance of this agenda for economic growth is such that we strongly recommend that the Chancellor continues to advocate for its advancement. Crucially, these measures can unlock substantial investment for the sector, without cost to the UK tax payer.

In addition, the British Business Bank should continue to be resourced such that initiatives like Future Fund: Breakthrough, Life Sciences Investment Partnership, and the British Growth Partnership are able to raise funds for investment into high-growth UK companies, and directly address the undersupply in late-stage venture capital. The launch of the National Wealth Fund is another very welcome development, but it is essential that the programme understands the growth opportunity inherent within the life sciences, and targets the sector accordingly as well as traditional infrastructure.

[16] BIA: UK biotech financing 2024. (2024).
[17] British Business Bank: Small Business Equity Tracker 2024. (2024).
[18] BIA: Finance report Q2 2024. (2024)
[19] BVCA and Beauhurst: UK scale-ups increasingly relying on overseas investors to grow. (2024).

Crowding in globally mobile commercial life sciences investment

The UK's leadership in life sciences innovation has not historically been translated into downstream commercial and manufacturing investment because of deficiencies in the broader commercial environment. Crucially, the UK has often been out competed by international competitors willing to offer more incentives to crowd in globally-mobile investment. The capital grants programmes committed to by the Chancellor in the Budget last year, namely the Life Science Innovative Manufacturing Fund, have been a welcome development to incentivise investment into commercial stage manufacturing facilities. It is essential that the full £520 million programme originally envisaged is delivered by this Spending Review. It should also be noted that for funding in this capacity to be successful, the grants must be tailored to SMEs as well as large companies.

Also crucial to attracting these investments, many of which come from the world's largest pharmaceutical companies, is the perceived commercial environment in the UK, and particularly NHS access and uptake of innovation, including medicines. Not only does this impact the UK's attractiveness for large investments, but it also impacts the wider ecosystem; the presence of large companies draws in talent and leads to knowledge agglomeration effects.

Market access in the UK requires jumping through complex and changing hurdles, and NHS uptake remains patchy and slow for innovation. We are aware that the proposed rebate for 2025 resulting from the 2024 Voluntary Scheme for Branded Medicines Pricing, Access and Growth (VPAG) is causing global boardrooms to look unfavourably on the UK. Periodic voluntary agreements on medicines pricing have served the UK economy, the NHS, and governments of all colours well over the past 60 years. Any financial control mechanism should be a single-digit, stable, predictable rate that is competitive with comparable markets, and in line with wider healthcare spending increases.

Regulatory environment

Relevant budgets

- Regulatory agencies identified below
- Department for Innovation, Science and Technology – Regulatory Innovation Office

Life sciences and biotech companies operate in highly regulated markets. Highly-innovative products developed and produced by the sector bring great benefits to society, create new industries, jobs and export-led growth, but they can only deliver these benefits if regulators are supportive of innovation. Relevant regulators for the life sciences and biotech sector are:

- **MHRA** – Medicines and Healthcare products Regulatory Agency
- **FSA** – Food Standards Agency
- **OPSS** – Office for Product Safety and Standards
- **HSE** – Health and Safety Executive
- **EA** – Environment Agency
- **APHA** – Animal and Plant Health Agency
- **CAA** – Civil Aviation Authority
- **HMRC** – His Majesty's Revenue and Customs
- **DEFRA** – Department of Environment, Food, and Rural Affairs

Regulation can be an enabler of innovation when it is proportionate, evidence-led, clear and easily navigable and delivered efficiently. The regulators named above must be mandated and appropriately resourced to deliver a pro-innovation regulatory service with these features for industry. The Regulatory Innovation Office is a welcome initiative within the Department for Science, Innovation, and Technology and should be resourced to provide a coordinating function. Regulators should also be resourced to take a leading role in innovative regulatory discussion on the international stage.

A pro-innovation regulatory framework delivered by effective, efficient and world-leading regulators will attract investment and ensure the UK is a supportive environment for UK businesses to start, scale and stay here, and for foreign businesses to invest here, creating jobs, investing in manufacturing and driving economic growth.

People and skills

Relevant budgets

- Department for Education - Skills England
- Department for Science, Innovation and Technology - UKRI
- Home Office

Growing the life science sector takes people as well as capital. UK life sciences broadly already employ over 300,000 highly skilled individuals across R&D, regulatory, legal and finance.[20] Over 50% of the life sciences workforce are in highly technical roles requiring advanced qualifications,

[20] DHSC, OLS, DSIT: Bioscience and health technology sector statistics 2021 to 2022. (2024)

with 70% holding degrees or equivalent qualifications – twice the national average.[21] As such, funding for the academic pipeline is needed, from undergraduate, to PhDs and post-graduate training. In addition, other technical qualifications such as T levels, as well as the funding for, and provision of, apprenticeships are essential to meeting the growing demands of a skilled workforce.

Skills England should ensure that the UK skill system is aligned with both the Industrial Strategy, and the Migration Advisory Committee (MAC) – making the system simpler for businesses to engage to attract industry investment – and should be resourced to provide a joined-up approach to skills across the economy with levels of industry engagement and input at least as high as that of the Institute for Apprenticeships and Technical Education (IfATE) Similarly, the Growth and Skills Fund is an important initiative that is hampered by complexity, making it difficult for SMEs to engage with. More funding is needed for the coordination of SMEs in these programmes, increasing direct engagement, and directing more resource into industry training.

Upskilling the existing workforce will also be imperative as the UK life science sector grows in capacity and moves into new frontiers. Increased investment into specialised programmes that address specific skills gaps should is needed. The UKRI's Medicines Manufacturing Skills: Centre of Excellence Hub is a prime example, and industry should be encouraged to match investment where possible.

Life science is a global industry, and innovation requires new ideas and diverse points of view. Embedding equity, diversity, and inclusion (ED&I) practices into the sector and promoting social mobility will help attract and retain the diverse talent that the sector needs. Beyond domestic talent, many companies complement their domestic expertise with non-UK employees that bring a diversity of skills, creativity, and perspectives, allowing them to compete in a global marketplace. In fact, 25% of those working within the sector are born outside the UK.[22] Therefore, creating a simple and efficient visa system to lower recruitment barriers for start-ups and scale-ups is essential for their success. Resourcing should be prioritized by the Home Office to speed up visa processing, especially dedicated schemes like the Global Talent Visa route.

[21] NFER: The skills analysis 2035: An analysis of the demand for skills in the labour market for 2035. (2023).

[22] BIA, ABPI, ABHI, SIP Life sciences 2035 developing the skills of future growth. (To be published)

International partnerships and trade

Relevant budgets

- Department for Business and Trade
- Office for Investment
- Office for Life Sciences

Alongside the Office for Investment and the Office for Life Sciences, DBT are making positive progress building a strong "concierge" offer for investors, supporting them through the process of investing in the UK, and events like the Global Investment Summit demonstrate that the UK has the capacity and capability to do this well. This service should continue to be expanded, as it's important this is offered to domestic and foreign companies alike, to secure investments in the UK. It is still very hard for companies, particularly smaller ones, who often do not know who to speak within government and must navigate these issues alone. This makes the UK less attractive by raising unnecessary barriers to investment, and often making the investment feel like more of a risk.

Similarly, government-facilitated trade missions provide excellent opportunities for UK businesses to build relationships with potential partners overseas. This is especially true for SMEs that do not have the resources or name recognition to open such doors themselves. In today's global innovation-led economy, building new R&D partnerships, finding new equity investors, or meeting potential business partners all contribute to a company's ability to succeed. Delegations and UK representation at conferences – as well as worldwide representation at UK conferences – can play a key role in the facilitation of these objectives. Work should be done to increase these opportunities for connection wherever possible, and work should be coordinated by OLS and OfI to ensure they are appropriately supported. Involving industry trade bodies in this is essential to ensure they are well targeted to the correct international markets and support promising UK companies.

As well as supporting businesses directly, the Department for Business and Trade should also focus on building the UK venture capital funding ecosystem by attracting and connecting international investors (sovereign wealth funds, pension funds etc.) with expert UK venture firms. This will enable the channelling of international capital into UK businesses without direct foreign influence on the Boards of those companies.

Energy and infrastructure

Relevant budgets

- Department for Transport
- Department for Housing and Local Communities
- Department for Business and Trade

The UK is a world-leading single hub for life sciences, large enough to have a global impact but small enough to be exquisitely networked. Transport and infrastructure to enable connections and growth are therefore essential. Cambridge and Oxford are in particular expanding rapidly with strain put on local infrastructure requiring attention. The commitment to establishing the Oxford-Cambridge growth corridor, with the associated innovation hubs and the acceleration and expansion of East-West rail, is a prime example of what is needed.

Smaller infrastructure facilities within the life sciences sector are also in need of investment if the UK sector is to continue to grow, especially as we adopt more advanced techniques for medicine manufacturing and bioprocessing. As manufacturing processes actively evolve to support government's Net Zero goals, facility design and requirements are also changing. Currently, the UK lacks a sufficient number of specialized facilities to meet the demands of future clinical pipelines, thus limiting growth.

Engineering biology, for example, depends critically on its ability to scale, and thus has a number of specialised infrastructure requirements that need to be met. Robust manufacturing and scale-up facilities, such as large-scale biomanufacturing units and GMP (Good Manufacturing Practice) facilities for novel therapeutics, as well as large-scale food grade fermentation facilities for cultivated novel foods systems are needed. In addition, advanced production facilities are essential – particularly open access (public) infrastructure for upstream and downstream processing, and bioprocessing sites that are capable of high-volume manufacturing. Investment into such infrastructure needs to be supported by an efficient supply chain, with production sites strategically located near secondary infrastructure – such as feedstock sources, or waste processing centres.

In order to future-proof the sector, and to be able to meet the annual manufacturing demand across all innovative therapies digitalisation, automation and AI driven analytical tools will be required. The government should fund initiatives for advanced digital infrastructure to enable optimized processes, digital twins and secure data storage.

Investing in manufacturing and infrastructure will drive economic growth by attracting global investment, creating high-value jobs, and expanding the UK's export potential. A stronger manufacturing ecosystem will not only support the life sciences sector, but also enhance the UK's resilience to future health challenges, and help position the UK as a world leader in advanced medicine production.