MedCity business plan 2022 - 2023

Introduction

MedCity represents the life sciences cluster for London. We boost innovation and investment in the region, securing the UK's position as a global science superpower.

Working in close partnership with London's world-leading universities, MedCity connects private industry with partners in the NHS, charity sector and research institutes to catalyse exciting new opportunities that advance cutting-edge R&D in areas such as AI, diagnostics, and rare diseases. MedCity builds collaborations to accelerate uptake of medical innovation and growth across the UK. We help policymakers understand what the life sciences ecosystem/industries require to thrive in a competitive international landscape

The last 2 years have seen unprecedented change in the London and UK health and life sciences ecosystem including the impact of Brexit, the pandemic, as well as the huge rise in investment into health and life sciences and the increase in demand for R&D space from industries looking for partnerships and growth in London.

MedCity has been agile and responsive in shaping its strategic direction to leverage the opportunities that have arisen, particularly in life sciences real estate and in support of new and growing companies innovating in diagnostics, data and AI. MedCity has supported levelling up policies by working with organisations such as the Northern Health Science Alliance (NHSA) and the Academy of Medical Sciences (AMS) as well as refreshing relationships with Cambridge, Oxford and international clusters. Having a wide industry outreach, MedCity has been an industry voice to agencies that are developing guidance and regulation to address challenges that industry face in developing and commercialising new technologies so that London and the UK can continue to attract inward investment.

Our advisory board has also been refreshed and diversified to include Dame Kate Bingham, Prof Alan Barrell, Dr Virginia Acha, Dr Annalisa Jenkins, Dr Pearse Keane, Dr Raj Mehta, Prof Sir Paul Nurse, Hak Salih, who will share perspectives and steer us on the challenges and opportunities ahead. Through investment in external affairs during this critical time, MedCity has regained political relevance at local, regional and national level policy making and expanding our communication output to continue to be seen as the expert convener.

In addition to the above, in 2021/22, we have attracted £163K commercial income (as at end Q3, exceeding our 21/22 target) and stabilised our financial position by developing a pipeline of opportunities that will enable us to grow the London ecosystem as well as help us to achieve MedCity's goal of having a sustainable business model that consists of a blend of grant and commercial income. This business plan highlights a strategic direction that demonstrates a change in our vision, emphasising our wide outreach.

Mission: 'to grow life sciences innovation and investment in London, securing the UK's position as a global science superpower'.

Vision: 'To advance cutting edge health and life sciences innovation, connecting London nationally and internationally to accelerate industry growth and investment and improving health and wellbeing'**.**

The following section documents key achievements in 2021/22 to date as well as a strategic direction for 2022-2025. The priority being focused growth and realisation of the opportunities that we have created over the last 12 months.

Achievements

Since its conception, MedCity has played a pivotal role in driving economic growth in life sciences with many achievements to its credit, increasing the reputation of London's life sciences and driving investment. Data represents end Q3 2021/22, note that it is draft at this stage and will be updated with full year data at end of FY 2021/2022.

- Exceeded our target this year by supporting **140** new clients (to MedCity) Q1-3 2021/22 and supporting over **1400** life sciences organisations from 2016 to date. These companies were supported to access space, investment and access to research via our broad networks and expertise.
- Supported over **£9m** Gross Value Added (GVA) to date (based on GLA methodology) as a result of jobs from inward investment projects arising from international engagement and our business support activities.
- A total of **148** FDI jobs (using GLA definition) have resulted from our direct support over the last 6 years.
- Enabled SME growth through establishing an additional **16** SME research collaborations through MedCity's Collaborate to Innovate Programme. This year, the London Economic Action Partnership (LEAP) funded 9 collaborative projects involving academia and industry partners in the field of medical diagnostics. In addition The Stroke Association funded 3 collaborative projects and 4 additional advanced therapies collaborative projects were funded via London Advanced Therapies.
- Provided mentoring to **20** SMEs on DigitalHealth.London Accelerator (DHLA) in 2021.
- Enabled over **100** SMEs and University spin outs to pitch at 18 MedCity Investment Hub showcase events. Collectively they have raised at least £40M with circa £7.5M raised directly from MedCity early-stage investor network and their introductions. Alongside pitch events, MedCity provided Investment readiness training and pitch advice to over 100 additional companies through the MedCity community and wider national network including helping international companies seeking to access UK investors and through supporting companies on various accelerator programmes such as DHLA and London South Bank University.
- In 2021 MedCity responded to the need of SMEs to be able to network virtually and launched an online community for life sciences and health tech SMEs to connect with the London ecosystem and access MedCity support to grow their businesses.
- MedCity has made significant impact in the shaping of life sciences real estate development in London to attract more inward investment:
    - publication of the second demand study providing an in-depth breakdown of life sciences growth in London, detailed analysis of space requirements for life sciences subsectors and recommendations to meet demand and continue the growth of the life science sector
    - launching of a Lab Providers Forum to support companies to get faster access to available space and connect London and South East lab providers
    - delivering on recommendations from the demand report by convening local authorities to discuss planning challenges
    - publishing a report to support optimal community development alongside life sciences cluster growth
    - MedCity represents the life sciences sector on the Mayor of London's Workspace Advisory Group, signifying the importance of life sciences within the region.

- In 2021, MedCity has focussed on amplifying London's strengths through our 'unleashing innovation' campaigns to establish a stronger cohesive London voice with policymakers aligned to the 'levelling-up' agenda. MedCity also worked with the Academy of Medical Sciences, other cluster organisations and independently to contribute to several policy consultations including on 'place-based R&D'.
- In 2020, MedCity leveraged its convening power to set up the London Testing Alliance, leading to the development of the MedCity Diagnostic Growth Hub (DGH). The DGH is consortium of diverse London and national partners led by MedCity as a platform to support faster diagnostic development. In 2021, the DGH was accredited as an AAC AI award partner for the evaluation of AI technologies awarded a grant via the NHSX/AAC AI awards.[1] In March 2022, the DGH was appointed as a NICE Evaluation Assessment Centre for real world evidence.
- In 2021/22, MedCity working in partnership with NHSA has progressed delivery against the Research England Development Fund, delivering international activities virtually, (e.g., co-hosting and representing Northern academic centres and innovators at events with overseas markets) and supporting and sharing learning across UK life sciences cluster organisations and hosting joint events (e.g. national investor workshop).
- In 2021, MedCity grew our outreach, increasing newsletter subscriptions by 15% to 4,185; LinkedIn followers by 40% to 2,702; Twitter followers by 4.5% to 6,153.

[1] AAC AI award: the Artificial Intelligence (AI) Award is run by the NHS Accelerated Access Collaborative (AAC) in partnership with NHSX and the National Institute for Health Research (NIHR). It will make £140 million available over four years to accelerate the testing and evaluation of the most promising AI technologies which meet the strategic aims set out in the NHS Long Term Plan.

Strategic Priorities 2022 – 2025

MedCity's 3 year priorities are set against a backdrop of the following political, economic, social and technological factors that the UK is facing.

Macro – environment: Political, Economic, Social and Technological factors

- Political – levelling up, government investment outside major clusters, increased competition for investment outside London, better channels and networks outside London needed to grow companies in the UK. Carbon Zero priority.
- Economic – UK growth post pandemic and Brexit, slower recovery, other markets preferable for some innovation commercialisation, UK still favourable for early research and development and growth of highly innovative R&D companies that are attracting investment (see MedCity's demand report 2021). Changing landscape for regulation to potentially be more favourable or aligned to EU and US (MHRA and HRA combined review for CTIMPs and upcoming MHRA device regulations).[2] Market access and reimbursement is still seen to be a challenge particularly for digital therapeutics.
- Social – development of Integrated Care Systems (ICSs), closer partnerships and governance between current partner organisations, can mean re-establishing relationships with local authorities, academia, NHS. Higher emphasis on self-management, review of where our companies are pivoting to e.g., B2C and B2B. There is more mobility post-pandemic than there was before, companies are choosing hybrid working environments, not placing themselves in London all the time but needing access. Patient Advocacy Groups becoming more influential, technology more accessible to the general public for diagnosis and management.
- Technological – convergence of Greentech, healthtech, move to sustainable innovation and growth in the use of AI and needs for data access. Skills and education become a higher priority to ensure effective implementation and use of innovation coming through. Advanced Therapies pushing through to the clinic.
- Partners – in particular the growth and strategic direction of HEIs and their funding as well as the GLA.

MedCity's Challenges and Opportunities:

Challenges – influencing government to invest in cluster organisations and MedCity as a key enabler for the growth of UK life sciences. MedCity's narrative should change to reflect our deep relationships, knowledge and networks within London that attracts global business and collaborations to the UK and our capability to connect to other regions to ensure that the business stays in the UK.

Opportunities –

- Making a bigger impact in providing a service offer for diagnostics, digital and AI technologies to thrive in London, addressing demand and as a result, developing models and frameworks that can be extended to or replicated for the UK. This supports the delivery of the Life Sciences Vision, the UK being a global hub for new and innovative technologies.

[2] MHRA: Medicines and Healthcare products Regulatory Agency, HRA: Health Research Authority, CTIMPs: Clinical Trials of Investigational Medicinal Products.

- Continue to accelerate the growth of SMEs through refreshing our programmes and services offers. In addition, enable London to be a global hub for green health and supporting entrepreneurialism that delivers innovation that will impact our journey to carbon zero.
- Influencing and leading change in London's life sciences real estate development to attract more inward investment and keep it here. Be a thought-leader to support national cluster development and creation of networks between clusters.

MedCity has a unique ability to evolve and be agile, stay relevant and leverage its neutral position to make broad scale impact directly and also through partners and stakeholders. 2022-2023 is a year where we will aim to demonstrate this impact on a national and international scale for the benefit of London and the UK. This is aligned to the priorities of our funders, the GLA and Research England.

Our strategic priorities to leverage the above opportunities will be focussed and deliver impact as follows:

- Cluster development, in particular shaping and leveraging opportunities within London life sciences real estate for growth of the sector and creation of FDI and domestic jobs. (part-funded by GLA)
- Business growth, supporting the growth of SMEs across health and life sciences and in particular aligned to our themes of advanced therapies, diagnostics, data/AI underpinned by a focus on sustainability and green healthcare.
- Through the above, developing national and international linkages for our core themes (diagnostics, data/AI and advanced therapies). (funded by Research England)

Investing in the delivery of an exemplary marketing and international strategy (part-funded by GLA) to create impact from the above focus areas will be an important area of our business plan, as will developing our operations function to support new initiatives. Underpinning the priorities will be a new focus on sustainability in healthcare and how MedCity can showcase London's role in leading towards carbon zero targets as well as continued effort on working with partners to shine a light on the importance of EDI within the sector. The aim being to give more opportunities for people across different sectors, experiences and backgrounds to bring positive impact to life sciences in London.

Strategic Priorities 2022-23

1. Cluster Development:

Our role in cluster development for London is pivotal to maximise the right development to attract inward investment, grow demand in life sciences in London and build connections nationally and internationally to ensure continued growth. Support from the GLA will help us to take this work further.

- Implement recommendations from the demand study which was published in 2021. Further develop the Lab Providers Forum to be an effective, efficient neutral brokering service for companies to find laboratory space quickly and create a network of providers for shared learning. Impact of that should be to support more companies to find the right space in London to grow.
    - Creation of more specialist space with access to operational facilities for early-stage life sciences SMEs, particularly in key locations alongside accelerator and incubation programmes.

    - For lab providers/developers/landlords to understand and be supported in how to deliver small scale manufacture space.
    - For MedCity to host resources/tools on an open platform for system benefit and to support our brokering work.
    - Delivery of networking hubs in London in areas of high demand to further mobility and collaboration for the life sciences community in London and nationally.
    - Ensuring that there is a flow through of skills and talent between HEIs/Industry; that through joint working a stronger supply chain in skills can be realised.
- Work closer with local authorities to upskill regions on successful life sciences development and attracting inward investment. Act as a neutral body to bring clusters together to optimise London working together in promoting strengths and assets. Win contracts to deliver this cluster development.
- Leverage cluster development expertise to advise and provide consultancy to international clusters for mutual benefit including knowledge and innovation exchange.
- Hire a dedicated business development lead to deliver on this work and link to our international marketing activities.

2. Business Growth:

The aim of our business growth function is to enable London to continue to be a hub for entrepreneurialism, attracting SMEs into London and engaging those who want to understand more about the London ecosystem with the ultimate aim of growing SMEs across the sector and beyond, to accelerate innovation development and job creation.

Our programmes are designed to help SMEs address the traditional barriers to growth; access to early-stage finance and investment opportunities, access to expertise (e.g., academic collaboration and support to commercialise the product) and access to office and laboratory space within London in which to grow the businesses – in particular aligned to our themes of advanced therapies, diagnostics, data/AI underpinned by a focus on sustainability and green healthcare. Our focus will be businesses wishing to access health and social care systems and also other markets (B2B and B2C).

In FY 2022/23 our priorities will be to:

- Review, strengthen and potentially broaden/deepen the services and programmes MedCity offers to SMEs prior to investment and/or assist them to raise finance to support the next stage of commercialising their product (e.g. evidence generation).
- Further develop and market the MedCity Diagnostic Growth Hub as an offer internationally, drawing in inward investment and an innovation pipeline.
- Implement recommendations from investment hub strategic review, linking access to investment throughout MedCity's core programmes and services offer.
- Build MedCity community offer to SMEs, facilitating access to all MedCity's programmes and services within a virtual peer support community, accessible to all SMEs interested in engaging with the London ecosystem.
- Continue to deliver value from core programmes (e.g., Collaborate to Innovate, DHLA) and review market demand beyond April 2023 (e.g., with third sector).
- Actively explore opportunities to create B2B offers, consultancy products and, partnership opportunities and alliances with other organisations e.g., CROs, investment groups, accelerators, professional services organisations – to deliver cohesive, competitive offers for diagnostics, advanced therapies, data and AI technologies.

3. External affairs, Marketing, international strategy

- External affairs objective is to increase MedCity 1 – 5-year funding and financial sustainability. The strategy to achieve this is to communicate MedCity's relevance to the current policy agenda and shape a new policy on clusters.
- One of the core strands of maintaining relevance is to shape and gain support for a sustainability offer from MedCity. Working with the Office for Life Sciences (OLS) and others, the ambition is to place London at the forefront of the sustainability in health agenda.
- Deliver a social media campaign promoting London Life Sciences in partnership with Novartis, MSD and non-pharma partners. Strengthen MedCity's value and brand as leader in championing entrepreneurialism and partner with relevant organisations to deliver maximum business growth whilst focussing on our strengths.
- Implement a refreshed international strategy with a focus to bring more inward investment from Wider Asia and Middle East for the London Ecosystem via the MedCity connected offers focussing primarily on diagnostics, Advanced Therapies and data/AI technologies.
- Attract more companies to benefit from our business support offers thereby raising investment, creating jobs and championing entrepreneurialism in London.

4. Operations and People

- Grow operations capability by hiring a dedicated operations manager to ensure we are delivering excellent client support by monitoring the client journey via our CRM and related processes.
- Prepare MedCity for scaling commercial activity by ensuring policies, processes and procedures to enable compliance and consistency across the organisation.
- Develop and implement a people strategy to promote team development, EDI and extend MedCity expertise through an Associate programme.
- MedCity actively promotes equality and diversity at its events, via recruitment practices and ensures compliance via the MedCity EDI policy and SOP. MedCity's EDI activities will include:
    - Implement findings from UCL gender diversity project and roundtable discussion, working with partners such as Equality, Diversity and Inclusion in Science and Health (EDIS) to highlight EDI challenges within London's life sciences sector (subject to approval of MedCity membership of EDIS)
    - Further to outcome of EDI roundtable, seek resource and/or partnerships to either modify and implement a Board leadership scheme, or propose an alternative
    - Continuous review of MedCity events, website, social channels and collateral to ensure accessibility and a diverse representation of voices

Key performance indicators (KPIs)

- Number of new clients/ongoing clients supported, and client journey reported.
- Number of additional direct life sciences jobs in London resulting from inward investment supported by MedCity, and jobs resulting from our programmes and services (e.g., Collaborate to Innovate, DigitalHealth.London Accelerator).
- GVA (cumulative) of additional direct life sciences jobs from contestable inward investment in London supported by MedCity.
- Number of commercial contracts signed.
- Additional capital raised for the continuation of the Collaborate to Innovate programme and other collaborative regional programmes (e.g., LEAP Diagnostic Collaborative programme).
- Additional collaborations with MedCity involvement (related to our programmes).
- Number of companies supported to locate in London.
- Additional commercial income target (internal target £225,000); (GLA target £100,000).

Communications and engagement with target audiences is measured by the following metrics:

- Number of newsletter subscribers (ensuring newsletter and communication content is representative of our diverse sector)
- Number of LinkedIn followers
- Number of Twitter followers
- Number of website visitors
- Number of mentions in press
- Number of attendees at events ensuring a diverse panel and speaker list
- Number of SMEs on CRM mailing list for targeted comms

MedCity actively promotes equality and diversity at its events and recruitment practices and ensures compliance via the MedCity EDI policy and SOP.

The following table illustrates performance according to GLA KPIs over the last 6 years Note that the jobs and GVA figures below have been used using GLA definitions and models. Moving forward, we intend to measure our performance with respect to jobs and GVA using sector standards *(ref: PWC report on economic contribution of life sciences industry)* in addition to the GLA model.

Measure and metrics[3]	**Yr 3 – 2016/17 (target) - actual**	**Yr 4 – 2017/18 (target) - actual**	**Yr 5 – 2018/19 (target) - actual**	**Yr 6 – 2019/20 (target) - actual**	**Yr 7 – 2020/21 (target) - actual**	**Yr 8 – 2021/22 (target) - actual**	**Yr 9 – 2022/23 (target)**	**Measure-ment method**
Customers: number of new customers supported[4]	(120) Actual: 334	(150) Actual: 229	(150) Actual: 262	(125) Actual: 288	(125) Actual: 147	(100) Actual: 140 (at Q3)	(100)	No. of approaches recorded by MedCity
GVA (cumulative) of additional direct life sciences jobs from inward investment in London supported by MedCity[5]	(£3.4m) Actual: £8.2	(£11.2m) Actual: £13.6m	(£14.8m) Actual: £14.9m	(£21.3m) Actual at end Q2: £21.8m)	(£8.5m) (based on updated methodology) Actual: £7.5m, or £8.9m based on 3-year persistence of 2020/21 jobs	(£9.3m, or £10.4m based on 3-year persistence of 2021/22 jobs) Actual: £8.4m, or £9.1m based on 3-year persistence	To be calculate d based on final 2021/22 GVA at end Q4	GVA calculated by GLA lead officer in conjunction with GLA Economics
Number of additional direct life sciences jobs resulting from the MedCity project	(10) Actual: 39	(25) Actual: 10 (5 counted for GVA calculation)	(25) Actual: 14 (11 counted for GVA calculation)	(20) Actual: 25	(20) Actual: 13	(16) Actual: 6 (at Q3)	(16)	No. of jobs with direct involvement recorded by MedCity for UK investment[6]
External gross funding raised for the MedCity project (Commercial and Sponsorship Income)	(Not a KPI)	(£48k) Actual: £48.4k	(£120k) Actual: £196k	(£140k) Actual: £139K	(170k) Actual: £53K	(£100K) Actual: £163K (at Q3)	(£100K)	Income recorded by MedCity

[3] All data in this table is subject to final verification.

[4] Individuals, SMEs, inward investors, investors, multi-national companies and any other legitimate clients supported by MedCity with advice or consultation, and who have not previously engaged with MedCity.

[5] In this table, data for years prior to 2020/21 are based on the previous GLA methodology, which included an assumption of 100% additionality. GVA based on lower additionality is provided for comparison in previous MedCity Business Plans. GVA is based on some jobs reported through L&P, and some which were not included in L&P's FDI completions, but which MedCity have also reported involvement in. The underlying information for the latter is therefore not of the same standard of documentation as those jobs reported through L&P. Due to reasons of commercial confidentiality, some of the jobs reported by MedCity are based on estimates. Only jobs that are considered to be contestable are included in GVA calculations. 'Actual' GVA data is subject to assumptions about likely persistence and number of jobs.

[6] No. of jobs recorded using L&P's FDI questionnaire on life sciences investment and job creation. It is possible that MedCity may also report jobs where they have had engagement, but which may not be in L&P's FDI completions. The underlying information may therefore not be of the same standard of documentation as those jobs reported through L&P.

The following table illustrates performance according to other (non-GLA) metrics over the last 6 years.

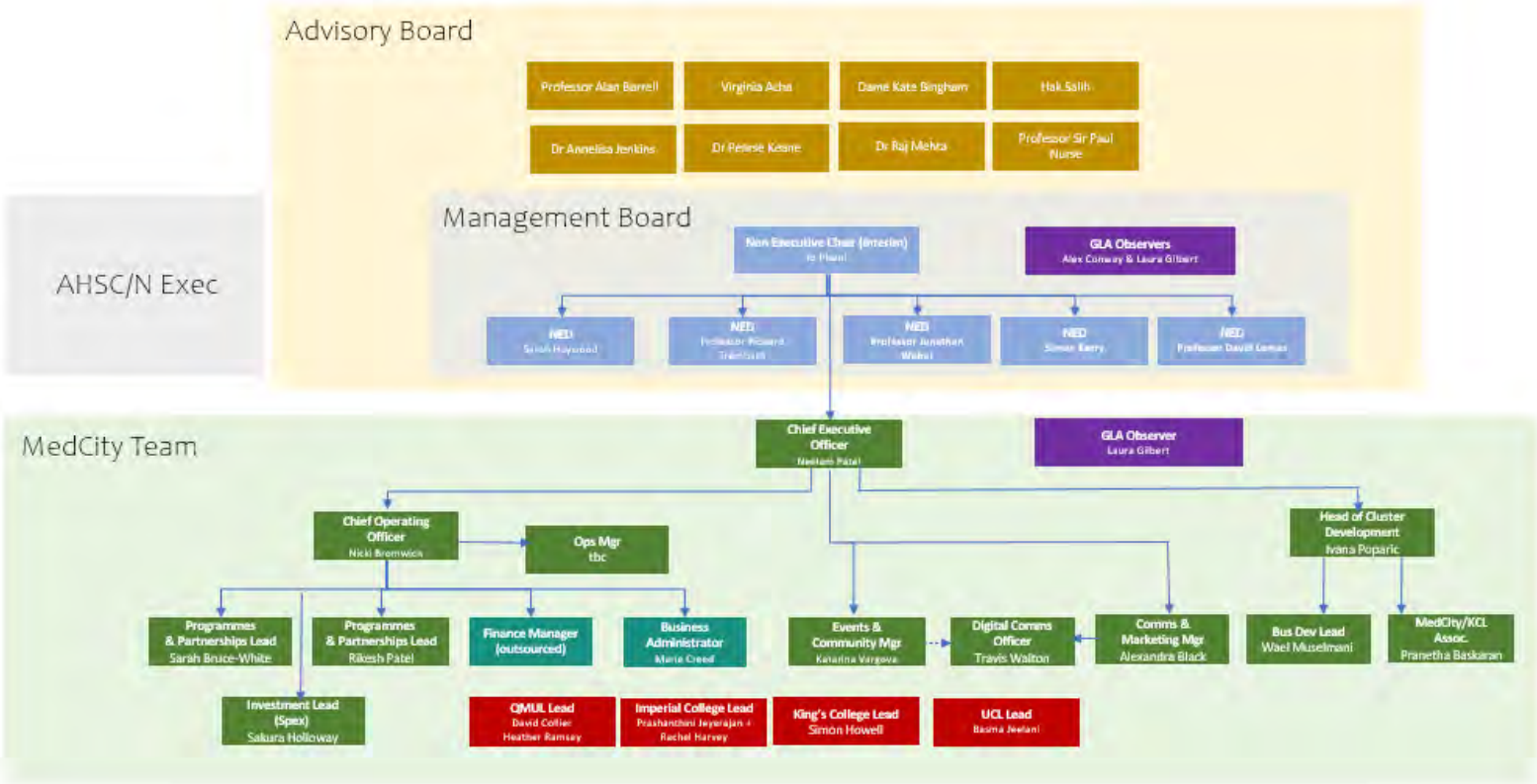
Measure and metrics	**Yr 3- 2016/17 (target)- actual**	**Yr 4- 2017/18 (target)- actual**	**Yr 5 – 2018/19**	**Yr 6 2019/20**	**Yr 7 2020/21**	**Yr 8 2021/22**	**Measure-ment method**
Additional capital raised for the continuation of the Collaborate to Innovate (from 2020 additional regional initiatives)	(£170k) £74,920	(Tbc) £249,998	£1.047 million to 2019	C2N2 ERDF extension: £840k (tbc 2019-21) – Connecting Capabilities £5M (2018-21) -£200k From Stroke Association	Nil	£50K CCF extension £1M C2N Diagnostics LEAP funded programme	Recorded by MedCity
Additional Collaborations with MedCity involvement[7]	(4) See Actual: 0	(5) Actual: 15, exceeding target of 12 over 3 years	(0) Unless new funding is confirmed	(10 over 2 years) Actual 12 (Correct Jan 2020).	Nil	At end Q3 28 in total (C2N 12 +Stroke Association 3 + LEAP C2N London Diagnostics 9 + C2 N Advanced Therapies 4)	Recorded by MedCity

[7] Inter-institutional or inter-disciplinary projects generated through the MedCity seed funding activity. Please note that inter-institutional and inter-disciplinary can refer to company to academic institutions, as well as collaborations that involve NHS/clinical services, as well as academic and/or company collaborators.

Risk register

	Scenario	Impact H/M/L	Likely-hood H/M/L	Mitigating actions
1	Failure to secure adequate funding to deliver on committed activities at the required pace.	H	M	Deliver sustainability agenda within business plan. Seek commercially viable business development opportunities.
2	Lack of longer-term (1-3 years) committed grant funding for cluster organisations including MedCity threatens the sustainability of the organisation beyond June 2023.	H	H	Continue with external affairs programme to raise awareness of important role MedCity plays in London life sciences ecosystem and contribution to national life science cluster development and UK economic growth.
3	Coronavirus pandemic continues to limit international travel and face-to-face meetings/networking events, impacting on inbound jobs, income streams from sponsorship and international missions.	H	M	Continue to engage with organisations interested to sponsor MedCity communities and activities and continue to host online events when necessary.
4	Inability to recruit to new posts.	H	M	Networks, social media and recruiters will be used.
5	Failure to secure adequate funding to develop new strategic initiatives such as diagnostics collaborative pathway.	H	M	Partnership discussions continue and project will not continue at risk if funding cannot be secured.
6	Impact of Brexit on trade, free movement, funding.	H	M	Prioritise activities relating to international markets and collaborate further with cluster organisations, London and Partners, Department for International Trade, and the Office for Life Sciences to create a unified message.
7	Levelling up agenda risks funding for both MedCity and academic institutions in the region.	H	M	Continue to work with Academy of Medical Sciences, NHSA, cluster organisations, BEIS and other organisations to minimise impact.
8	Failure to deliver on funded projects.	H	M	Invest in people strategy and operations to support on time and on budget delivery of committed projects.

Appendix A: Current Organogram



Appendix B: Draft Summary of income and expenditure for 2022/23

Income	Q1	Q2	Q3	Q4	Total
Continuing Grants					
GLA	£50,000	£50,000	£50,000	£50,000	£200,000
RED	£150,000	£150,000	£150,000	£150,000	£600,000
ERDF - DH.LA	£3,076	£3,076	£3,076	£3,076	£12,305
ERDF - Collaborate to Innovate	£0	£0	£0	£0	£0
CCF	£0	£0	£0	£0	£0
LEAP - London Diagnostics Collaborative	£25,000	£25,000	£0	£0	£50,000
Commercial income	£163,991	£157,000	£0	£125,000	£445,991
Event Income	£17,500	£0	£0	£0	£17,500
TOTAL	**£392,067**	**£385,076**	**£203,076**	**£328,076**	**£1,308,296**
Expenditure	**Q1**	**Q2**	**Q3**	**Q4**	**Total**
SALARIES inc CONSULTS	£171,181	£171,181	£180,575	£177,575	£700,512
COMMS AND VISIBILITY	£17,810	£57,810	£62,310	£65,810	£203,740
COMPANY & OFFICE	£5,600	£8,100	£15,327	£9,850	£38,877
PROFESSIONAL SERVICES	£40,875	£39,207	£39,207	£39,207	£158,496
PROGRAMME/ WORKING SPEND	£20,500	£20,500	£500	£5,500	£47,000
BIO AND OTHER INTERNATIONAL VISITS	£36,000	£32,000	£5,000	£12,000	£85,000
EVENTS	£3,000	£500	£4,850	£500	£8,850
TOTAL	£294,966	£329,298	£307,769	£310,442	**£1,242,475**
Profit/Loss	**£97,101**	**£55,778**	**-£104,693**	**£17,634**	**£65,821**

Financial sustainability and Pipeline

MedCity currently has a mixed funding model consisting of grant-based funding from the GLA, Research England, European Regional Development Fund (ERDF), Connecting Capabilities Fund and commercial income from programmes, services and sponsorships line with the strategic priorities; cluster development, business services to support SME growth, sponsorship and events.

MedCity will receive £600K grant income from Research England until June 2023 and will need to demonstrate financial viability both in terms of commercial income and confirmed grant funding by December 2022 at the latest to sustain its operations.

Having achieved £163K commercial income at end Q3 2021/22, the ambition by end of 2022/23 is to secure both grant funding to support core operations and sustainable funding ideally for 1 – 5 years. Additional commercial income will continue to strengthen the mixed funding model and to support additional activities to grow the life sciences sector in London in line with MedCity's strategic priorities.

The 2022/23 pipeline remains strong with a number of new initiatives awaiting confirmation, including a sponsored social media campaign for London and a cluster development project in partnership with Capital Enterprise in Lambeth. The diagnostics growth hub model will continue to strengthen with an aim to become sustainable, and other business support services and partnerships with investors and third sector organisations will be explored, as well as more paid for events hosted by MedCity.

The additional *gross* commercial income target based on our pipeline for financial year 2022/23 is estimated to be £495,000.

We will continue to seek and leverage partners to bid for non-dilutive funding and continue to work with national cluster organisations to influence a national cluster policy to include funding. We anticipate a public funding income stream to support at least 70% of MedCity's operating budget to accelerate and leverage opportunities for sector growth and ensure long-term financial sustainability.

MD2949 Appendix 2

Highlighted cells denote activities that are related to GLA funding						Q1			Q2			Q3			Q4	
					Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan-23	Feb	Mar
Strategic Focus	**Deliverable**	**Related KPI (if appropriate)**	**Deadline**	**Lead**												
Cluster Development																
Enable SMEs to access space speedily via MedCity offering a brokering service.	15 SMEs to be introduced to the Lab Providers Forum and other partners	FDI jobs	Q4	WM												
Facilitate a new network of Local Authority representatives to share experience on challenges with respect to life science real estate development (eg planning, affordable workspace etc)	Quarterly meetings	Positive feedback	Q4	IP/NP												
Publish a framework designed to offer guidance on the benefits to local Community of life sciences development.	Validated Framework, adopted by authorities	(Domestic) jobs	Q2	IP												
Upscale local authority regions to attract inward investment, bringing clusters within London together to promote London's strengths and assets	3 projects in London (including delivery of workshops, involvement in selection of developers, advisory services)	FDI jobs/ collaborations	Q4	IP												
Share expertise on cluster development internationally by delivering a consultancy project.	1 contract	commercial income	Q4	IP/NP												
Support creation of more specialist space with access to operational facilities for early-stage life science SMEs in key locations	Publish a paper on recommendations following CGT manufacturing roundtable.	commercial income	Q1	NP												
Explore the demand for networking hubs in London in areas of high demand to further mobility and collaboration	Pilot with Lab providers forum	jobs / commercial income	Q2	WM												
Articulate our offer on cluster development and life science real estate clearly on our webpage and collateral	Website updated and linked with relevant resources (medcity map, clinical trials map, supply/demand etc)	FDI jobs / commercial income	Q4	IP/AB/WM												
Deliver a roundtable to explore the opportunities to increase flow through of skills and talent between HEIs and industry and develop a stronger supply chain in skills	Summary of output from the roundtable		Q4	IP/NP												
Business Growth (Access to finance, commercial expertise and academic collaborations)																
Access to finance																
Review and implement recommendations from strategic review of MedCity's investment hub linking access to investment throughout all core programmes and services across diagnostics, advanced therapies, data and AI technologies	Deliver agreed recommendations	commercial income (contract/ sponsorship)	Q4	NB/SBW												
Building on experience gained from year 2 event, jointly with NHSA deliver a second jointly branded national investment showcase, involving at least two other UK LS cluster organisations to secure a larger audience (RED)	Event delivered. Event review & benefits for MC	RED success metric	Q4	SBW												
Continue the focus on attraction of investment into London by delivery of a successful Future of Life sciences investment with LSE	Advisor to event; Keynote/video delivered alongside PR	Comms / PR	Q3	NP/NB												
Expand MedCity community pilot into a successful virtual peer support community facilitating access to all MedCity's programmes and services	Satisfaction scores and metrics related to the purpose collated and reviewed monthly	Commercial income. Comms /PR	Q4	TW/AB/NB												
Access to collaborative expertise																
Pilot a sustainability model for DGH	1 commercial partnership	commercial income	Q4	NP/RP												
Enable 3 SMEs to achieve collaborations via Diagnostics Growth Hub (RED) and facilitate one funded research collaboration for innovations in sustainable health (RED)	3 collaborations facilitated plus 1 in sustainable health	RED collaborations	Q4	NP/RP												

Publish a report on progress of the development of the Diagnostics Growth Hub initiative, including case studies on collaborations developed and the impact on the development of diagnostics innovations, and disseminate the report to national and international audiences (RED)	report published	RED	Q4	NP/RP/AB												
Continue to support C2N LEAP London Diagnostics programme delivery, and delivery of other existing C2N programmes (e.g Stroke Association)	C2N programme delivery		as per milestones	RP												
Continue to promote Advanced Therapies as a key strength of London & UK. Deliver events plan & support ATN community transition to MedCity Community offer within Mighty Networks platform	Transfer of ATN into MedCity Community		Q1 -Q2	RP/KV		Southern AT UKAT event 11.05	Northern/ Scotland AT event									
Scope opportunities & prioritise 2 actions to seek collaborations for MedCity within & outside London e.g. (extension of existing or new initiatives for C2N, DHLA, DGH etc)	one collaborative partnership established		Q2	NP/NB/RP			BREACH									
External affairs, marketing, events and international strategy																
Deliver external affairs strategy to communicate MedCity's relevance to the current policy agenda and shape a new policy on clusters	Meetings with policy-makers, MedCity cited as appropriate		Q4	Ovid												
Deliver a social media campaign promoting London Life Sciences in partnership with pharma and and non-pharma partners	Sponsored campaign metrics achieved	commercial income	Q3	AB												
Implement a refreshed international strategy with a focus to bring more inward investment from new markets such as wider Asia and ME	Events plan noting key missions and events	FDI, collaboration	Q1	IP/KV												
Facilitate participation of members and institutions and Industry partners from both MedCity & NHSA clusters to attend at least two virtual / in-person international event/conferences (RED)	Total 15 participants & 30-50 attendees	collaborations RED	Q4	IP/KV							BioJapan					
Medcity and NHSA will each lead one virtual or hybrid/in person engagement event with an existing international territory and one virtual roundtable meeting with an emerging territory (RED)	Target 30 – 50 attendees at each.	event (RED)	Q4	KV						DIT China webinar	BioJapan					
Medcity and NHSA will jointly host an engagement event with Chinese/Singaporean organisations (RED)	Event delivered	FDI, collaboration (RED)	Q4	IP/KV												
Following UI2 on green healthcare, explore policy and business support opportunities to enable London to be seen as the hub for green healthcare innovation development	Board agreement on key initiatives for 2022/23/34		Q4	NP												
Operations																

Conduct a gap analysis on what policies, processes and procedures MedCity needs to develop and implement to ensure compliance and consistency in delivery of services.	Hubspot upgrade; SOPs, GDPR compliance etc.		Q2	Ops mgr												
Operationalise sustainability plan (beyond RE award), jointly created with NHSA	Plan developed	RED	Q4	NB/NP												
People																
Develop and implement a people strategy to promote team development and retention	Refreshed annual review cycle & team objectives. Board sub committee for pay & renumeration established		Q1	NP												
Extend MedCity expertise by implementing an associate programme	Programme delivery		Q1	NP												
Recruit operations manager	Recruited and onboarded		Q1	NB/NP												
Recruit business development manager to support cluster development	Recruited & delivering metrics		Q1	IP/NP												
Recruit KCL/MedCity associate to support Lambeth project	Recruited and onboarded		Q1	IP/NP												
Ensure team objectives and any development needed is implemented in a timely way.	Team objectives understood and aligned to overall strategy		Q1	NB/IP/NP												
Equality, diversity and inclusion																
Further to outcome of EDI roundtable, seek resource and/or partnerships to either modify and implement a Board leadership scheme, or propose an alternative	Modified board leadership programme or an alternative scheme implemented	GLA	Q3	SH/NP												

Implement findings from UCL gender diversity project and roundtable discussion, working with partners such as Equality, Diversity and Inclusion in Science and Health (EDIS) to highlight EDI challenges within London's life sciences sector (subject to approval of MedCity membership of EDIS)	EDIS Membership secured and findings from UCL gender diversity project and roundtable implemented	GLA	Q3	NP/KV/AB													
Continuous review of MedCity events, website, social channels and collateral to ensure accessibility and a diverse representation of voices	Narrative regarding changes made	GLA	Q4	AB													
As part of the Advances in Clinical Trials series and in partnership with NIHR, host a symposium focused on technologies and methodologies in trial recruitment to maximise the inclusion of diverse populations	Event delivered		Q4	NP/KV													
Explore with diagnostic growth Hub (DGH) partners the potential for devices and diagnostics to improve services for under-represented populations within London	Event scoped and delivered if possible		Q4	NP/KV													
Contract delivery																	
Lambeth ERF project	Key milestones																
Spex call 1																	
Symposium																	
Sponsorship renewal																	
Belgian mission																	
Pipeline																	
Advances in Clinical Trials symposium £7500																	
Other events																	
BRC																	
Spex call 2 (tbc)																	
London social media campaign																	
Eyebio																	
Mission Fund																	
Lift roundtable																	
Belgian Mission																	
Interview panel for Snowfields development																	
AWS																	
One London consultancy																	
UAE consultancy																	
HEE partnership?																	
MedCity Community offers - pitch readiness; canvas; 2 evidence workshops & 2 tailored workshops? Aim £5000																	

MD2949 Appendix 3

LONDON LIFE SCIENCES REAL ESTATE DEMAND REPORT

In association with

MEDCITY

CreativePlaces

CONTENTS

REPORT METHODOLOGY: Over the summer of 2021, over 80 companies completed the study survey. An additional 24 companies participated in focus group workshops and 30 engaged in 1-1 interviews. Businesses were involved in pharma/biotech, regenerative medicine, medtech, devices, digital health, AI, clinical trials and support service provision. Companies were typically active in more than one of these and not easily definable by one particular category or another. Over 50 of those businesses completing the survey were able to clarify requirements for floor space. The sample size of 80 businesses participating in the survey represents only a fraction of the hundreds of businesses that are R&D intensive in London. Large corporates tend to keep their plans for growth confidential until an immediate requirement for space exists, whether they may have space in London today or not. Thus the total requirements for the capital far exceed those found through this study.

FOREWORD

Neelam Patel
MedCity CEO

London is a renowned global life science hub. The co-location of world-class universities and clinical research, alongside infrastructure and access to investment for biotechs and other innovation led start-ups in medical sciences – from diagnostics to gene therapy – makes it a unique cluster of discovery. London is also home to some of the world's most prominent life sciences companies, from Novartis to Google.

When we began research for this report in May 2021, we were already aware that life sciences companies in London were finding it difficult to secure space for their healthcare R&D. Our aim was to quantify this demand for space, understand the drivers for where such space should be ideally located, and to dig deep into the specific needs of companies in AI, digital health, medtech and cell & gene therapy – some of the key subsectors in which London excels.

This deep dive expert report surveyed and questioned more than 100 companies and organisations. It reflects their views and their measurable requirements for space in London. Thanks to their valuable contribution, we now have a unique depth of understanding of the infrastructure needs of life science companies. There is a huge opportunity here to work together in creating the right places for life science companies to grow.

As the cluster organisation representing life sciences in London, our purpose is to catalyse growth. We want to ensure this by supporting supply of appropriate real estate in order to optimise the expansion of healthcare SMEs and industry, and in turn participating in the economic well-being and health of the city's communities.

KEY FINDINGS

- **Demand for space has increased fourfold.**

Over 500,000 sq ft of demand exists for life sciences real estate in London; 270,000 sq ft of that demand is for space within two years (up from 67,000 sq ft identified in 2016 in our previous report, Planning for Growth). This excludes requirements for space where property seems to have been found, such as for MSD's 220,000 sq ft requirement. The innovation in therapeutics, diagnostics and healthcare delivery spurred by the Covid-19 pandemic appears to have heightened demand for space.

- **Demand is rising faster than supply.**

London's wet laboratory innovation centres are all full. There is a desperate lack of provision for start-ups and small companies. These fast growth companies identify the lack of ready available property made fit for purpose, cost effectively and in locations that optimise their success as a primary barrier to growth.

- **Increasingly sophisticated real estate needed.**

Extract to air capability in wet laboratory space is becoming more important and clean room space for small-scale manufacture now forming part of the demand profile. Those businesses seeking more substantial suites of floor space often have to work with landlords on conversion of existing stock that can tie up limited capital in building work; there is a preference to pay higher rent for purpose-built space.

- **Access to talent is high on the agenda.**

Companies want to grow activity in London for a good number of reasons, including its research excellence and its creative people. They consistently say it is an excellent place to recruit staff – in some key roles applicant numbers and applicant quality is the best in the world, even beyond Boston. Large corporates in particular prioritise access to skilled labour over other considerations such as rental costs.

- **London is a global hub for Advanced Therapies.**

Developers of groundbreaking Advanced Therapy Medicinal Products (ATMPs) are increasingly clustering in London, but companies in this sub-sector struggle to find the sophisticated facilities needed for their core R&D and R&D-intensive manufacturing.

- **New laboratory space models are emerging.**

London is a hub of innovation beyond sciences. New ideas in design and delivery are providing solutions to this unprecedented demand for space, especially small scale lab suites. However, supply and demand visibility and strategic planning discussion are currently uncoordinated. A savvy approach by a co-ordinated group may help facilitate better supply.

RECOMMENDATIONS

1. SME SUPPORT

Create more specialist space with access to operational facilities for early-stage life science SMEs by leveraging the planning framework. Locate these spaces in key London locations alongside accelerator and incubation programmes.

2. GMP MANUFACTURING

Develop a roadmap for landlords and developers on building small scale manufacture to support the delivery of flexible, adaptable laboratories and clean rooms that are licenced and fit for purpose. Utilise the expertise of the Cell and Gene Therapy Catapult to build the roadmap via a working group that includes real estate developers and city planners.

3. ACTIVITY & DEMAND VISIBILITY

Create a dynamic resource of life science R&D demand, activity and needs across London that can be used by ecosystem stakeholders to optimise real estate development.

4. HUB CURATION & DEVELOPMENT

Build networking hubs in London in areas of high demand to allow for mobility and collaboration between innovators, clinicians, researchers, investors and developers within life science clusters in London and nationally.

5. SKILLS DEVELOPMENT

Ensure London remains a leader in attracting and growing life science talent by fostering partnerships between higher education institutes and industry that deliver a strong supply chain in skills for the future.

IMPLEMENTATION: MedCity will seek to hold recommendation-specific roundtables with stakeholders across our ecosystem over the next six months to agree how the five recommendations can best be actioned to meet demand and continue the growth of the life science sector.

DEMAND NOW & WHY LONDON

Demand is outstripping supply in life science innovation boom

All London's wet laboratory innovation centres are full and with waiting lists. In 2021, space designed for wet laboratories at Imperial's iHub in White City has been fully let; Queen Mary BioEnterprises' facility at Whitechapel has expanded to provide some additional space focussed on Medtech, AI and Digital Health; and an Innovation Gateway facility to deliver shared wet laboratory space is under development at the Institute of Cancer Research in Sutton. However, demand is rising faster than new developments are coming online, and over the last few years property owners have been working with businesses to create laboratories out of office buildings as best they can whilst the development pipeline works to catch up.

> "Demand is rising faster than new developments are coming online"

Why the UK and London

The UK stands out as a key location for life sciences R&D on the global stage. The UK is seen as excellent for its quality of research base, quality of dynamic SMEs and its innovative people and culture (fig. 1, overleaf). Those involved with encouraging foreign direct investment indicate that European companies see the UK as particularly good for its talent pool and access to the NHS, and ahead for therapeutic innovation. From the US, the skill level of people and the excellence in early-stage innovation is rated highly. The fundamentals for London's life sciences R&D activity are exceptional.

London forms a critical part of the Golden Triangle cluster – particularly in relation to AI, Advanced Therapies, Medtech and Digital Health. The challenge for London now is how it can best provide for growth and use the life sciences sector's potential to maximum advantage.

LEVELLING UP

Supporting London as a hub of life science discovery can impact on levelling-up activity

- Growth in R&D and small-scale manufacture in London leads to larger-scale manufacturing in lower-cost locations outside London
- London-based companies contract out research to regional Contract Research Organisations (CROs) that can undertake R&D more cost effectively
- Relationship building with specialist manufacturers that supports advanced product development in the UK
- Facilitating two-way engagement with R&D intensive businesses outside London who need better access to the world-leading research, funding, R&D, regulatory affairs and business-building know how embedded in the capital

Fig. 1: How the UK ranks for 14 business criteria

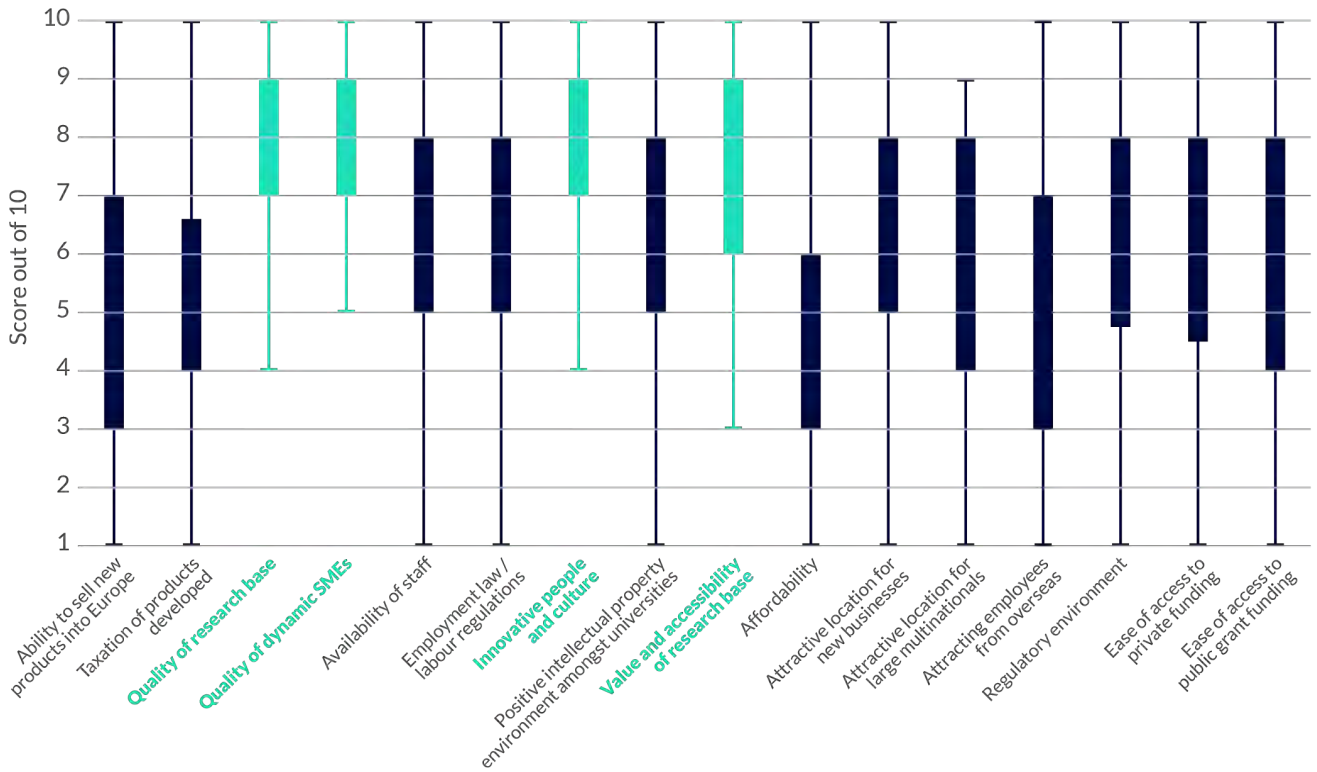
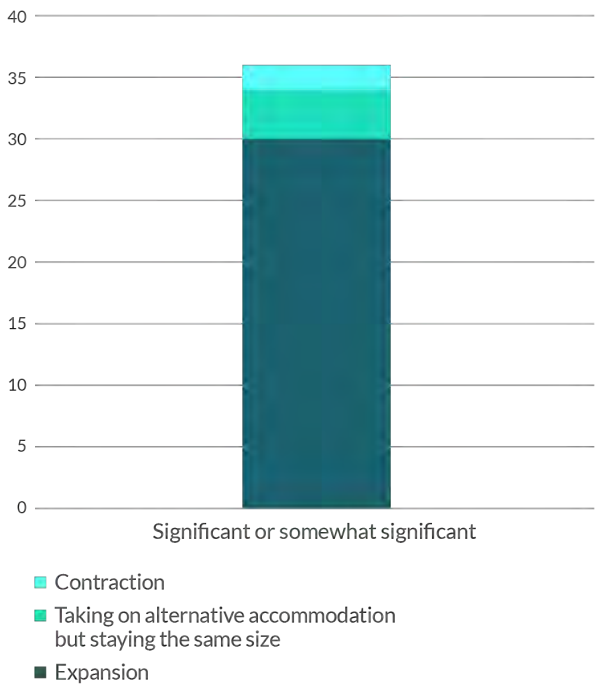


Fig. 2: Impact of Covid-19 on real estate demand



The impact of the Covid pandemic has largely been to drive towards more space, not less.

London's start-up formation is among the very best in the world. The Global Entrepreneurship Network Report of September 2021 shows London's start-up ranking is second only to Silicon Valley (fig 3.), and tops the table for life sciences talent (fig. 4).

Fig. 3: London ranks 2nd to Silicon Valley for its start-up ecosystem

	Ranking	Performance	Funding	Connectedness	Market Reach	Knowledge	Talent
Silicon Valley	#1	10	10	10	10	10	10
London	#2 (tie)	9	10	10	10	7	9
New York City	#2 (tie)	10	10	10	10	5	10
Beijing	#4	10	9	5	9	10	10
Boston	#5	9	9	9	9	5	10
Los Angeles	#6	9	10	3	9	7	9
Tel Aviv	#7	8	9	8	10	4	8
Shanghai	#8	10	7	1	9	10	9
Toyko	#9	8	9	1	8	9	9
Seattle	#10	9	7	7	8	7	8

Fig. 4: London ranks top for life sciences talent

	Talent						
	Tech		Life Science			Experience	
	Cost	Quality & Access	STEM Access	LS Access	LS Quality	Scaling Experience in Ecosystem	Start-Up Experience in Ecosystem
Silicon Valley	5	10	2	5	10	1	2
London	5	10	10	10	10	10	10
New York City	3	10	10	10	5	6	8
Beijing	9	8	10	10	4	10	10
Boston	5	10	8	9	9	7	7
Los Angeles	3	10	7	7	7	6	7
Tel Aviv	6	5	6	8	2	8	7
Shanghai	9	7	10	9	3	10	10
Toyko	1	7	10	9	1	10	10
Seattle	1	9	1	1	10	2	2

Source: The Global Entrepreneurship Network Report, September 2021

> "For MSD, place is very important for many reasons. The greatest factor in London's favour as a destination for scientific research remains the ability to attract and retain leading talent. London's connectivity to the rest of the UK and to the rest of Europe is a notable benefit, from a talent perspective, but also when it comes to establishing research collaborations."
>
> — Dr Virginia Acha, Associate Vice President – Global regulatory, MSD (MedCity advisory board member)

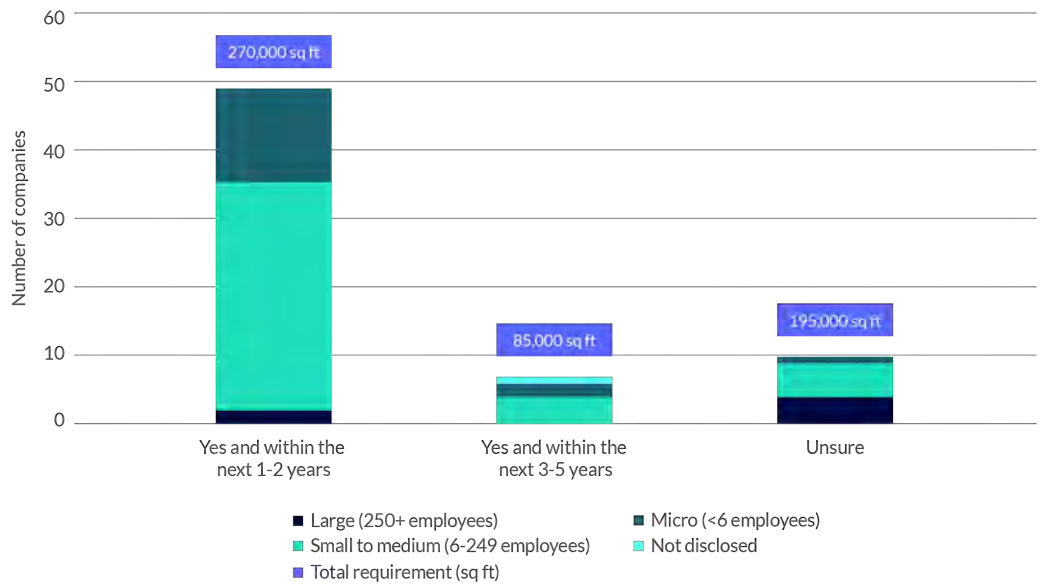
Within the life sciences, we see that UK businesses, and those in London, particularly, are raising very significant and growing sums of money, which will impact on real estate demand. International money pouring in at ever greater scale is a significant pointer to a greater need for property into the future.

Fig. 5: Series A to C funding raised by UK life sciences SMEs in the last five years

DEMAND ANALYSIS

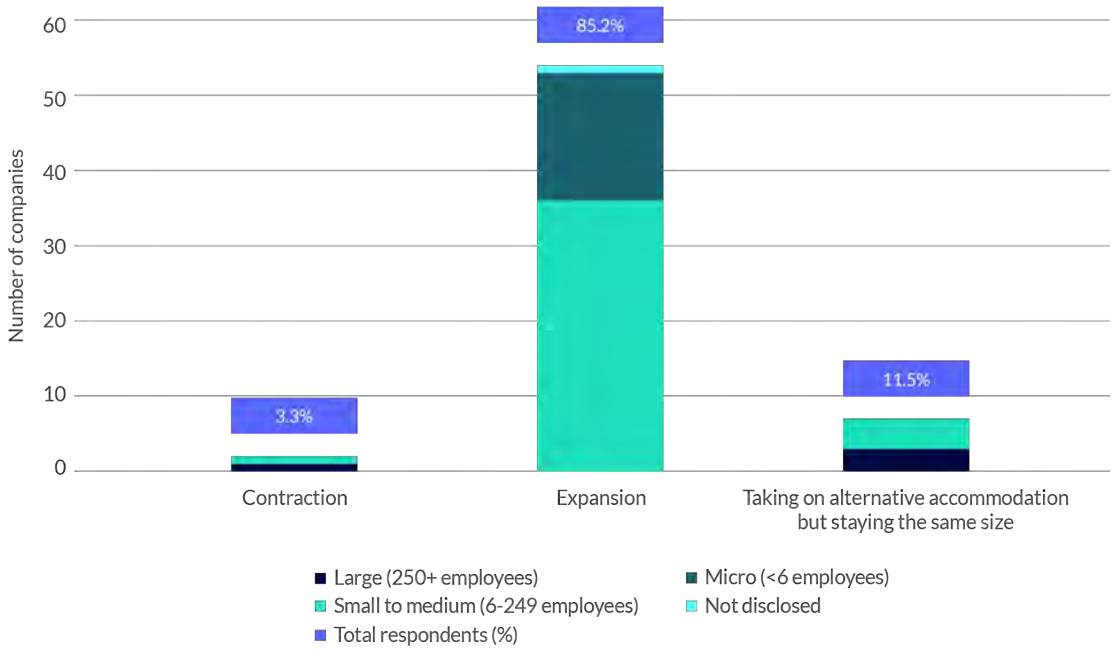
The amount of property required can be broken down into time horizons for analysis.

Fig. 6: Identified property demand



Overall, the real estate footprint is expanding. Large corporates tend to be driven by relocation and rationalising space; SMEs and micro businesses are expanding their real estate footprint.

Fig. 7: Space requirement driver



Life science businesses in 2021 need ever more technically advanced facilities. A significant proportion need 'extract to air' capability in their laboratories and some even need clean rooms for early stage, small-scale manufacture. This comes as new ways of developing therapies evolve, necessitating new ways of creating the material required. The manufacture itself is highly R&D intensive and intrinsically linked to the work to find therapies for life-threatening diseases. Companies need space that allows for this type of specialist small-scale manufacture.

Fig. 8: Companies with requirements for accommodation (high to low specification)

What is the significance of wet lab space with extract to air?

Wet laboratory space with extract to air is typically needed where potentially hazardous substances are involved and require much more building plant, ducting and chimney flues. Sub-sectors that may need it include Advanced Therapies and those working in vaccine development. Growing needs for wet laboratory space that can deliver extract to air capability are a challenge for the property industry and planning authorities.

For those companies that seek manufacturing and extract to air wet laboratory space, the amount of space dedicated to these activities within the total amount of space they lease (or may own) is a key consideration in designing a building's capability. Percentages required vary significantly.

Fig. 9: Ranges of space required by companies with a need for manufacturing facilities

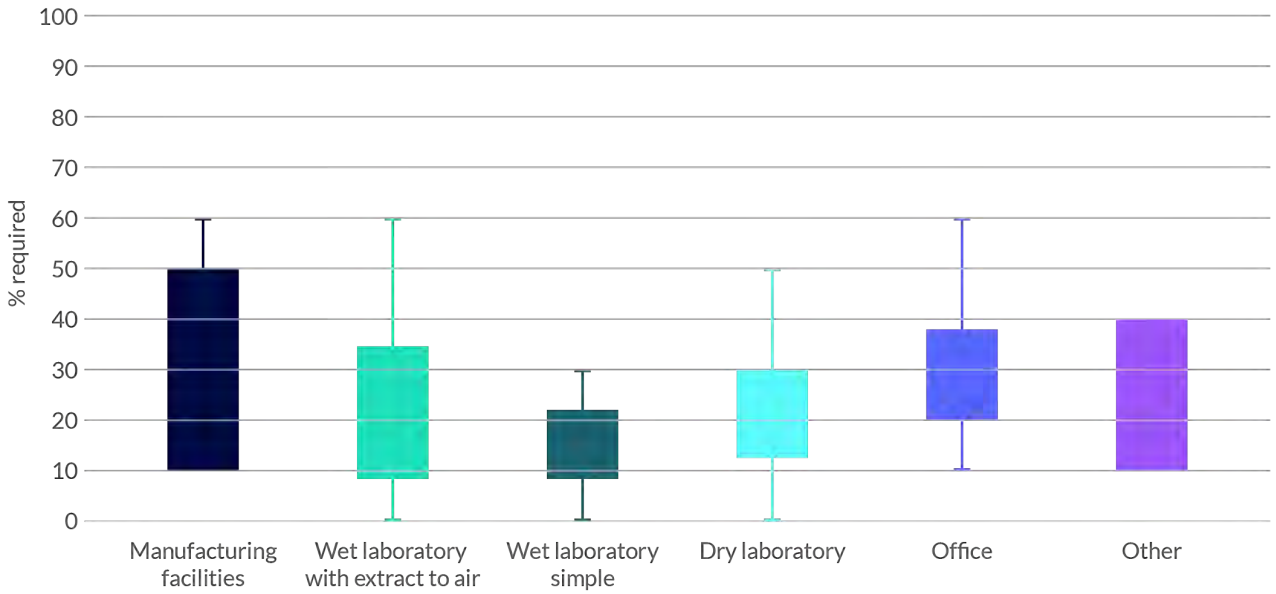
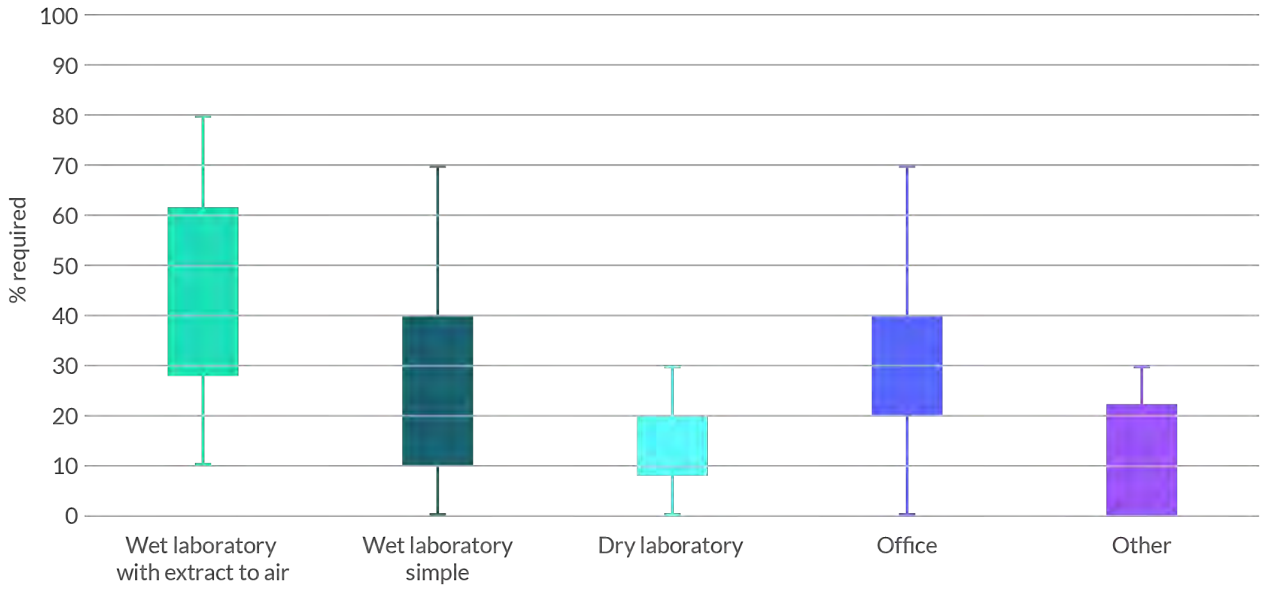
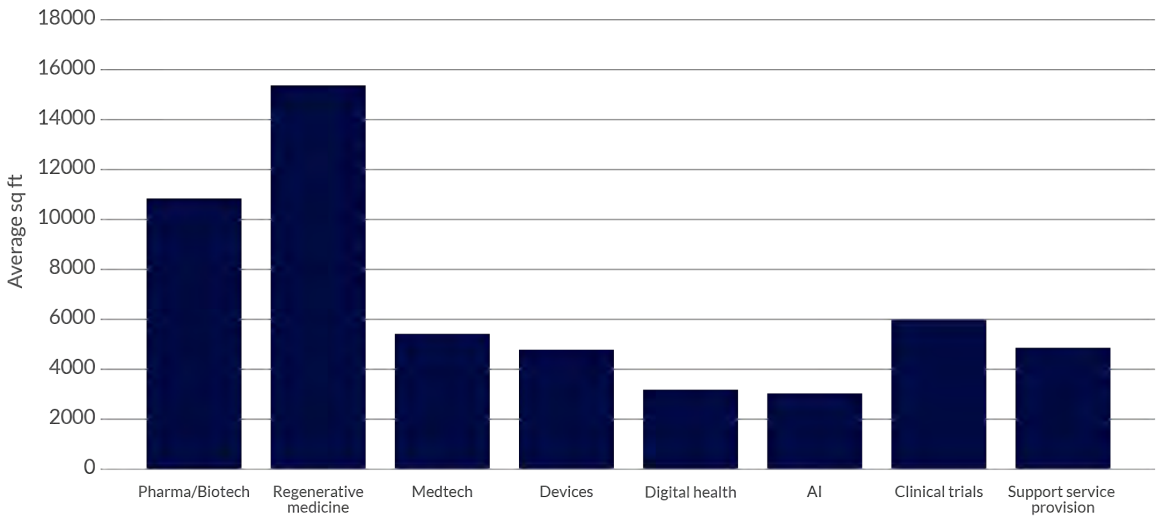


Fig. 10: Ranges of space required by companies with a need for extract to air wet laboratory space, but no manufacturing space.



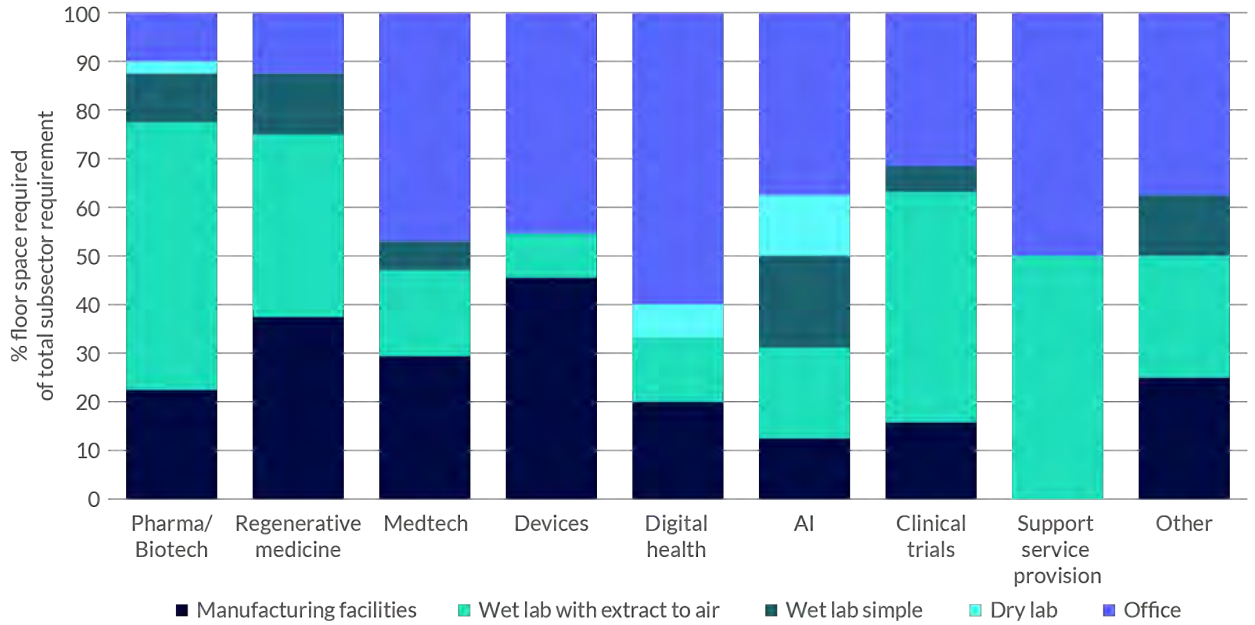
Analysis of the subsectors that require most space is challenging, given the way that many businesses have overlapping subsectoral activity. However, those working in pharma/biotech and regenerative medicine may need larger suite sizes than other subsectors.

Fig. 11: Average floor space required by companies working in each subsector



Those working in various life sciences fields tend to have different accommodation needs when it comes to make up of property.

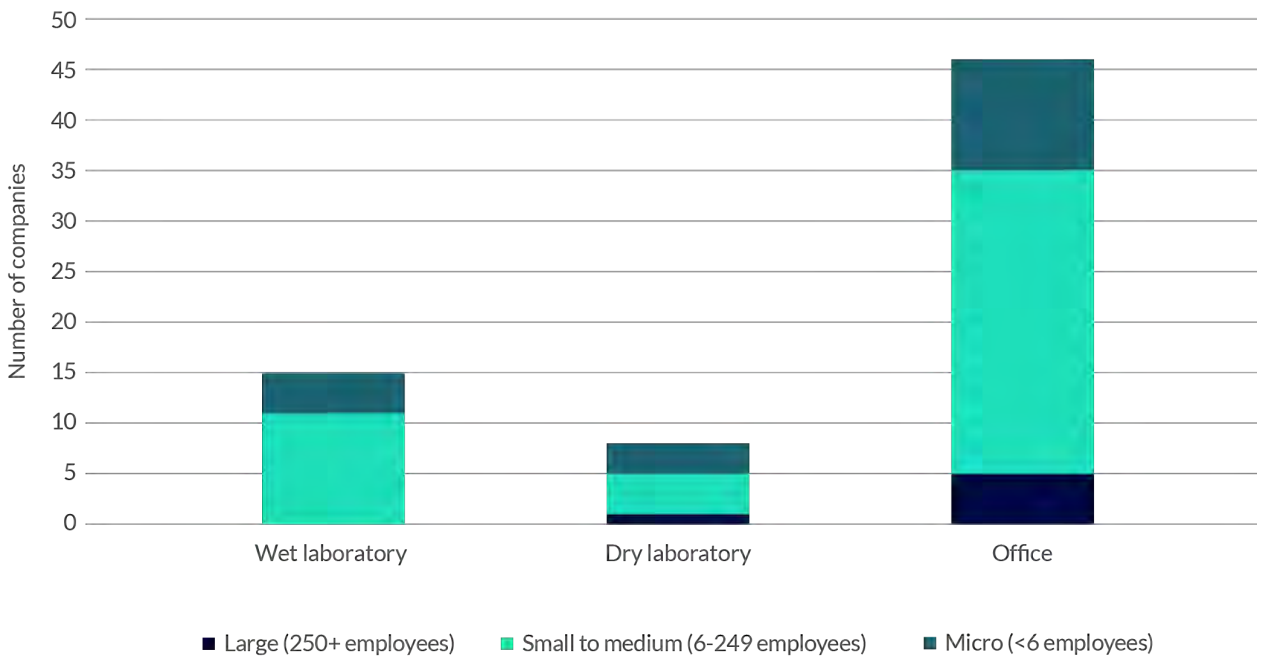
Fig. 12: Comparison of space requirements of companies in each subsector



The survey showed a very significant need for hot desk office space, fully embracing flexible working, and a reasonably high number of micro and SME companies also expressed interest in shared wet and dry laboratory space.

Agile and flexible working was repeatedly mentioned by respondents during research for this report. How London responds to needs in this area will be critical to its competitiveness. It is already a vibrant, accessible hub. Pro-active work to deliver added value to those who want to work in a flexible way could be very powerful — encouraging people in for meaningful interface with others.

Fig. 13: Hotdesking space needed (compared with wet and dry lab space)

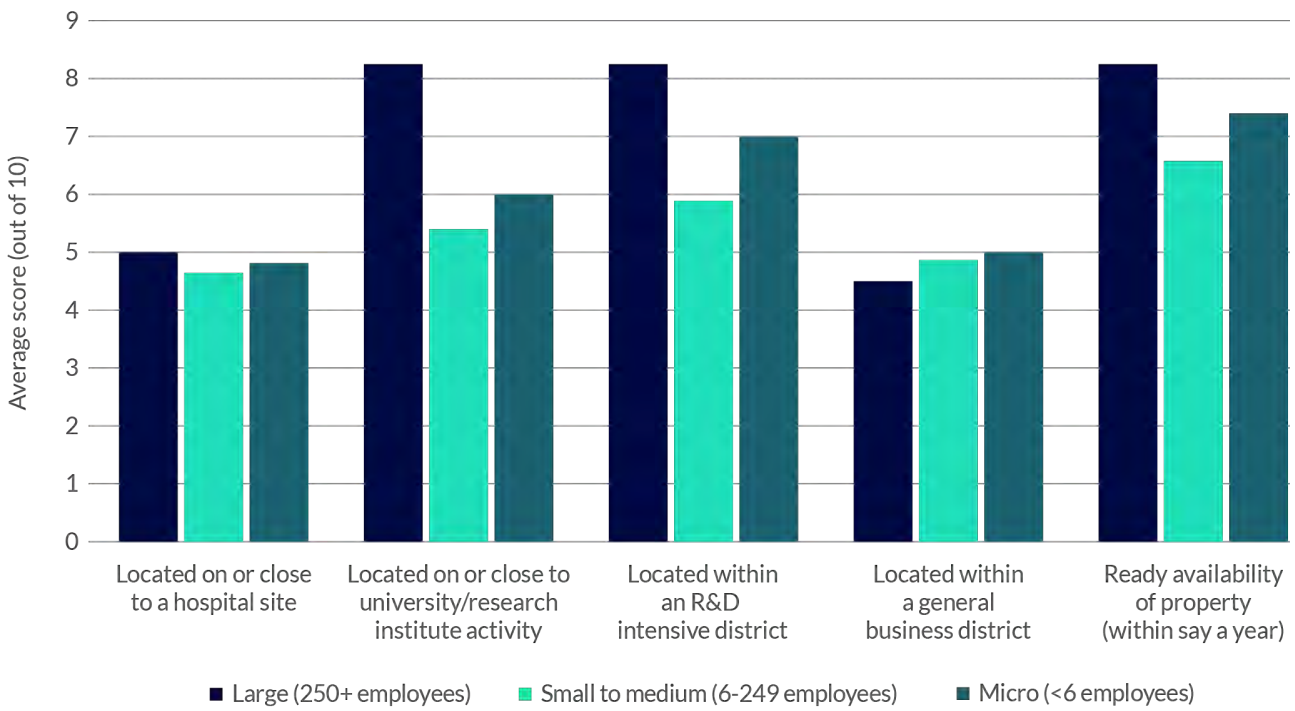


PROXIMITY TO CLINICAL SETTINGS

In 2016, a number of businesses confirmed a desire to be on, or close to, a research-intensive hospital. The 2021 study shows that whilst a good number value it, for most there are other factors that are more important. Indeed, for some who nevertheless work extremely closely with hospitals, there are significant benefits to being elsewhere.

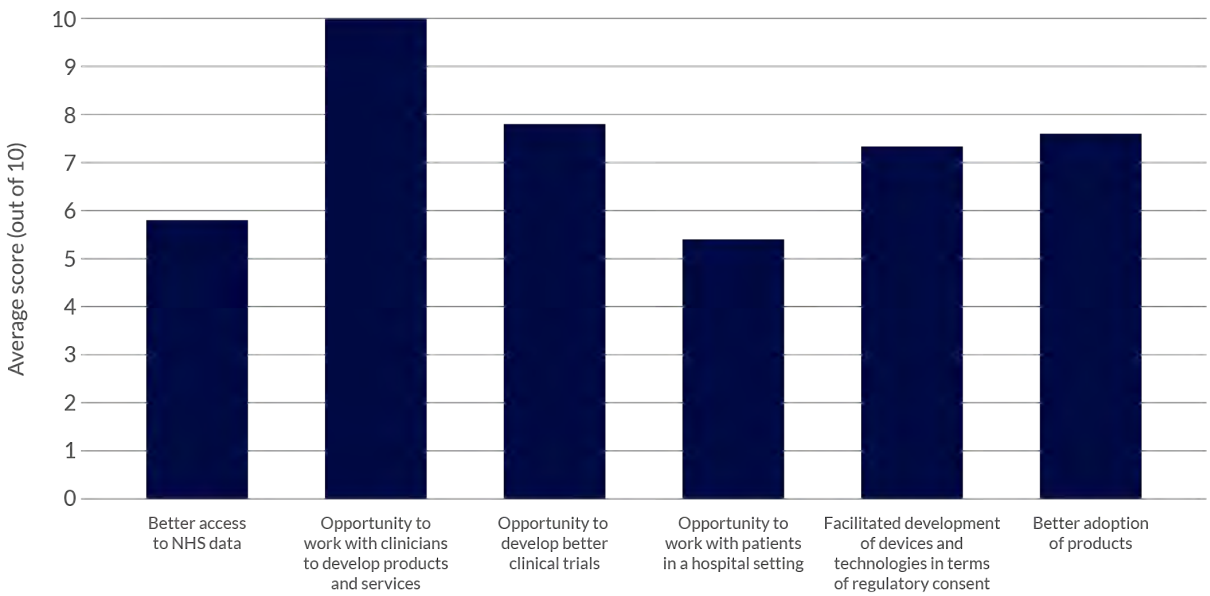
Some confirmed a preference for commercial environments that are more dynamic in being able to respond to changing property needs over time – and others to the ability of commercial environments to offer more amenities and stronger business culture. Some also said that as their work with clinicians and patients grows, they often work with a number of hospitals and 'neutral' territory can be helpful in this respect.

Fig. 14: Importance of co-location priorities



Micro and SME businesses are most in favour of taking space at, or close to, hospitals – possibly because they may otherwise find it harder to gain traction with key people they want to work with. Some of the multi-nationals are working with people in hospitals on an almost day to day basis without finding a need to lease space there.

Fig. 15: What businesses are looking for if hospital proximity is important



WHAT DO HIGH-GROWTH SUBSECTORS NEED?

Advanced Therapies

London and Stevenage are key locations for the sector at an international level. London has extraordinary research and skills availability. Stevenage has extraordinary manufacturing capability. With significant challenges and significant R&D required in initial small-scale manufacture, the two locations are interlinked. Companies vary in their locational preference and some will accept a split location approach.

Businesses in the sector would like to see:

- Affordable workspace for start-ups (for whom both Stevenage and London are very expensive)
- Better provision of wet laboratory and clean room space in London, available at higher specification but not necessarily at great scale
- Universities and hospitals making their equipment and facilities more usefully available, using agreed protocols around use
- Ever more endeavour to grow skills and talent

AI

Re-invention of the workplace is underway. Large companies may find a London office helpful in the competition for talent but flexibility and mobility means that virtual and international offices can pop up anywhere, around key people, for all sizes of company. Connections and dynamism are vital. Getting people involved with face-to-face creativity will be really helpful – planning around challenges and coming together to socialise, have fun and celebrate success seems to be important.

Businesses in the sector would like to see:

- A cluster of varied spaces and activities growing in a single relatively central location that gives easy access to biotech know-how, cross-domain activity and provides added value to members of the community as the space is used
- A more holistic Golden Triangle approach with easy to find, access and use, Life Sciences community spots at places like leading London hospitals
- Greater provision of biotech start-up accelerators and incubators

Data & Digital Health focused on NHS adoption

Businesses working in this field undertake engaging work with clinicians and others in hospital and care environments but do not find a hospital location critically important. Indeed, a neutral, well-located space, leased from the private sector can provide good opportunity to create a dynamic business environment that can cater for growth and potentially bring hospital actors together to consider some of the key issues affecting the sector. Many SMEs find relatively central London workspace prohibitively expensive.

Businesses in the sector would like to see:

- Hot-desking and meeting spaces in key locations that can be available at reasonable cost
- Centrally located space close to a major transport hub that can host regular evening networking events – to socialise ideas and hear from/meet leading community actors
- Cat 2 laboratory benching and small-scale suites readily available on a flexible basis

MedTech

Flexibility is key in the new workplace model. Those involved with medtech development seek engagement in broad and rich ecosystems and believe that more can be done to both utilise the resources that exist in London and build the ambition to scale businesses fast – at a time when it is now relatively easy to raise significant investment, particularly from the US. They would appreciate easier access to high quality manufacturing and aspire to an ever-stronger culture of idea sharing.

Businesses in the sector would like to see:

- Universities and hospitals make their equipment and facilities more usefully available, with agreed business friendly protocols around use
- Better links to high quality manufacturers within a reasonable travel distance (e.g. The Midlands)
- Grow coordination of the life sciences sector in London, involving all stakeholders

GROWING SMEs

Challenges caused by chronic lack of space

Despite London's reputation as an outstanding ecosystem for start-ups, early-stage life sciences companies in the city are being especially hampered in their efforts to scale up by lack of lab space. Emerging healthcare businesses in London are faced with minimal provision of lab benches in university and hospital facilities.

Availability has been reduced even further by the Covid pandemic. Some universities and hospitals believe that some space could be freed up (at Guy's and St Thomas' NHS Trust and KCL, for example), yet in practice it is likely that capacity is very limited. There are huge waiting lists to get into the innovation centres that exist. At London BioScience Innovation Centre (LBIC), for every 120 enquiries received over the past 12 months, only three or four suites of space are made available. Over half of these enquiries have been made over the last four months, and the total space needed by the 120 enquiring companies totals close to 100,000 sq ft.

Seeking solutions

The SME community is keen to find solutions to the chronic space shortage. One proposed solution is to divide up large, older spaces in office, industrial or even retail buildings and convert them to R&D facilities. For those raising Series A rounds and beyond, as they outgrow innovation centres there is resistance to spending on conversion and investing in capital expenditure when space needs can change quickly. A more appealing solution to tenants is to lease space specifically designed for the use intended. A highly flexible approach to wet laboratory space, following the 'WeWork' model, enabling agile working, also has merit.

Being in a vibrant location (not necessarily life science districts) is very important to SMEs in order to support recruitment. Even good life sciences locations like White City are still not perceived to be particularly strong in this respect at this point in time. More remote locations may be available with laboratory space at £40 per sq ft, say, but companies would typically prefer to be more central. Stakeholders in the sector need to consider how valuable such businesses are to the ecosystem and find solutions for them.

A central hub has been suggested for events with key opinion leaders, conferences, and networking. This is conceived as space to explore collaborations, business funding, areas of future development and regulatory approvals. Space could have large zoom screens to help engage virtual attendees/speakers. Networking events are seen as critical, ideally in the form of specialist meetings with entrepreneurially minded opinion leaders. Businesses want to meet more scientists. Grant funding in this area might help — for hard or soft infrastructure development.

COST AND LOCATION

Business leaders see issues around cost and location very differently

Drawing together evidence from the market, one to one discussions, feedback from our roundtable meetings and analysis of responses to our survey, it appears that:

- Large corporates are less rent sensitive and their location decisions are principally driven by proximity to, and ability to recruit, the best talent – meaning that highly accessible locations in places with leading edge research/R&D and a competitive angle on talent recruitment is more important that property cost

- SMEs have more varied drivers/creative ways of looking at their operation and working practices. They can be flexible around nature and location of accommodation and have tended to go where there is space that is or can be made available. They are keen to keep costs down – particularly any capital expenditure. However, those beyond Series A are happier to pay higher rents and secure appropriate, fit for purpose property in good locations

- Micro businesses have next to no money and need to beg, steal and borrow space today, but which appears to be in very limited supply. For those businesses being formed by lead academics and clinicians, having space very close to where they are based is of critical importance

- Small businesses not yet at series A funding rounds can only afford costs in line with innovation centre rents. Those at Series A funding levels are happier to pay rents a little above market rates for office space in a particular location, in order to have open-plan space that can be fitted for laboratories, but it needs to be delivered ready to fit out with services infrastructure available. Length of leases will typically depend on demand/supply ratios at the time and specific circumstances

Fig. 16: Attractiveness of potential locations

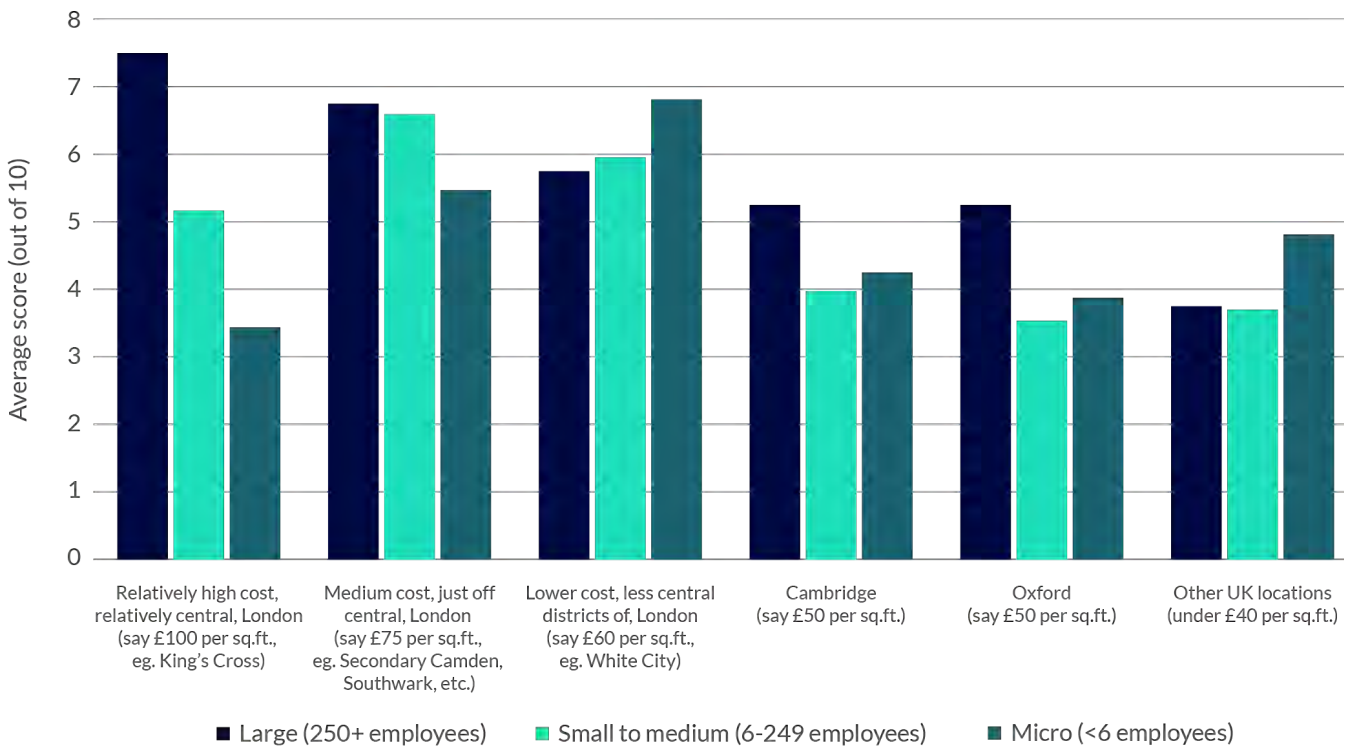
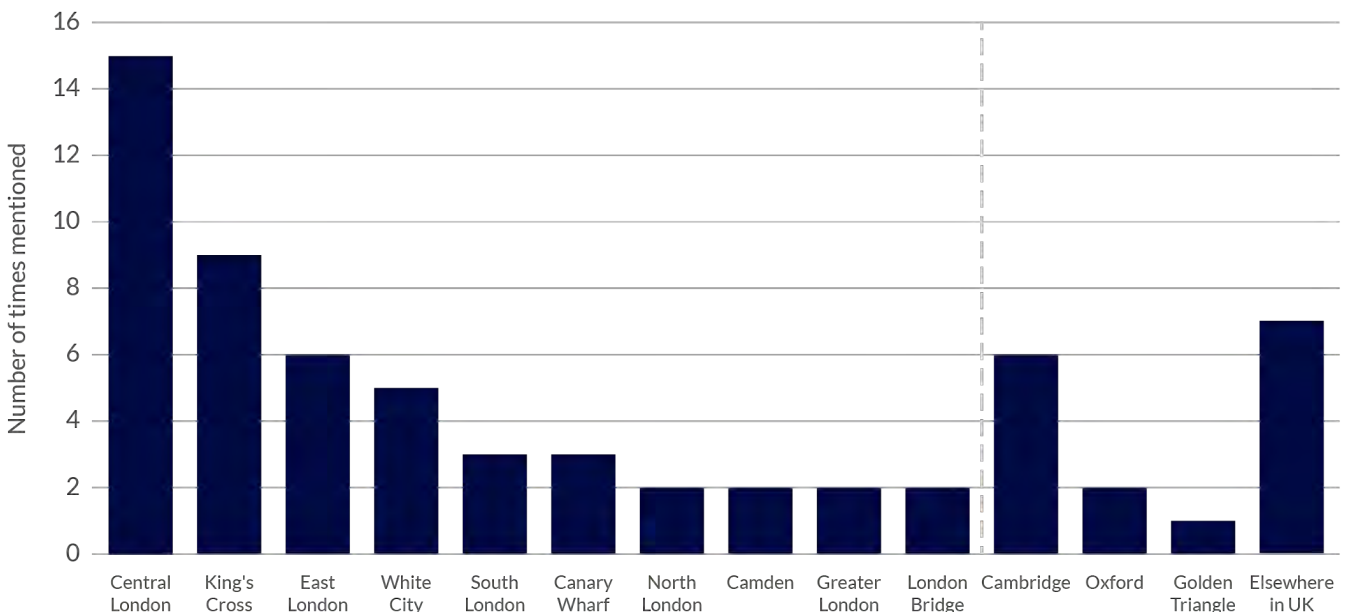
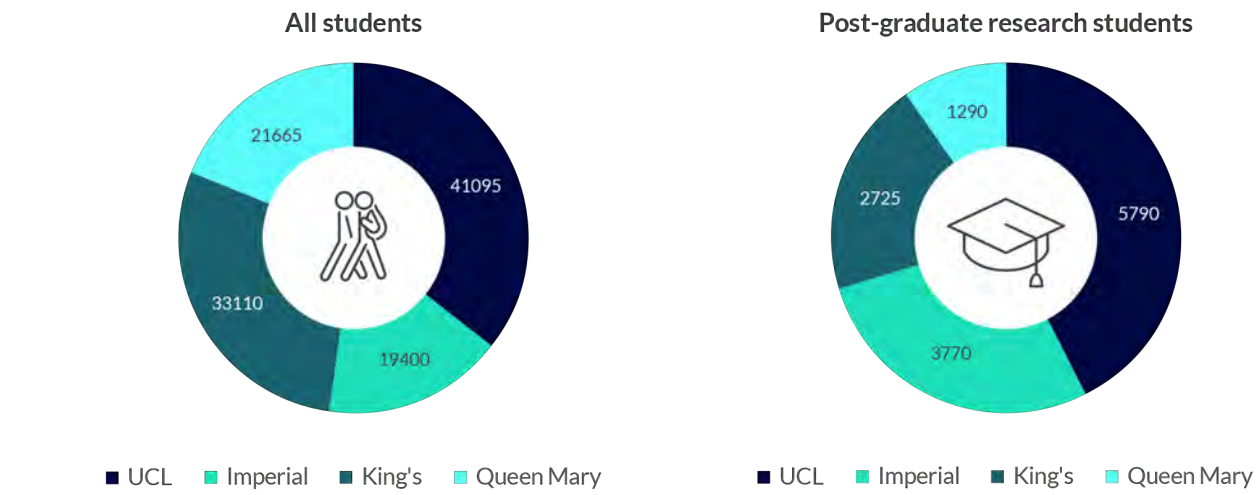


Fig. 17: Specific locations deemed attractive (open question)



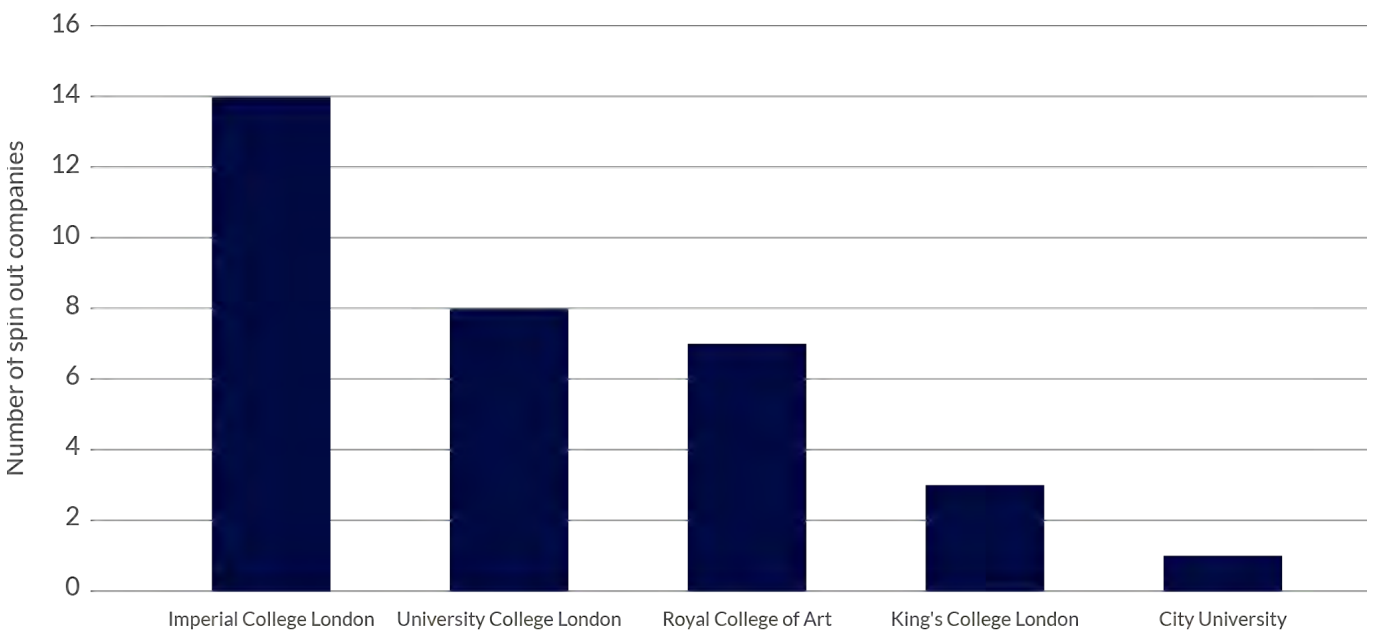
With large businesses particularly keen to know where talent might best be found, we have highlighted some potentially relevant information linked to university activity:

Fig. 18: Total students (all subjects) enrolling at some key London universities 2019/20



Source: HESA

Fig. 19: Number of Life Sciences spinouts from London universities since 2016, which are still active today

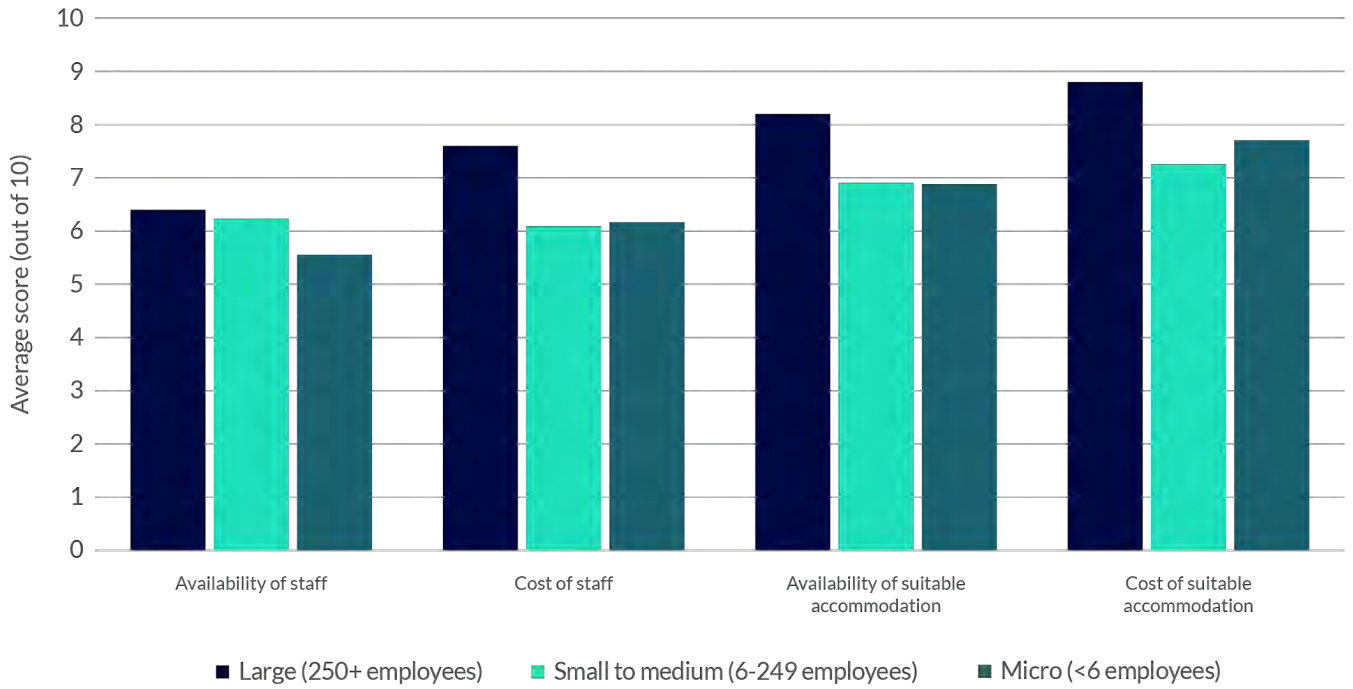


Source: Beauhurst

BARRIERS TO GROWTH IN LONDON

With an overwhelmingly positive narrative around life sciences R&D and clarity on what businesses want, it is important to consider potential barriers to success, in conjunction with what industry leaders feel they need from universities, hospitals and the public sector.

Fig. 20: Relevance of identified barriers to success as seen by companies of different sizes



> "All too often, conversations around infrastructure and connecting the science community focus on big companies and large academic institutes. We need to make sure start-ups and SMEs are considered too because it's the success of those businesses that feed the pipelines of bigger life sciences companies – the whole ecosystem needs to thrive together. At the moment, infrastructure and availability of lab space is limiting our growth."
>
> — Krzysztof Potempa, Founder and CEO of BRAINCURES

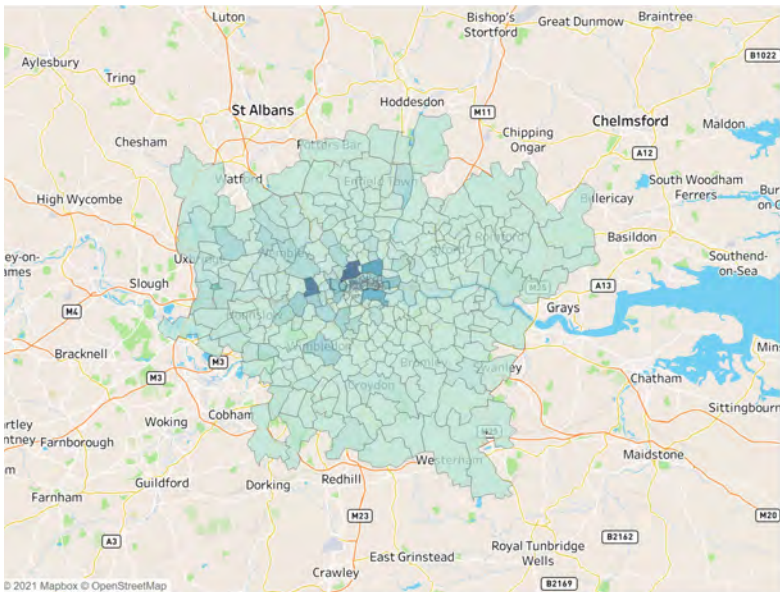
Businesses were asked an open question about the nature of support that would be helpful. Answers naturally fell into 5 categories.

Fig. 21: Nature of support deemed to be helpful (open question)

WHERE ARE R&D-INTENSIVE BUSINESSES LOCATED?

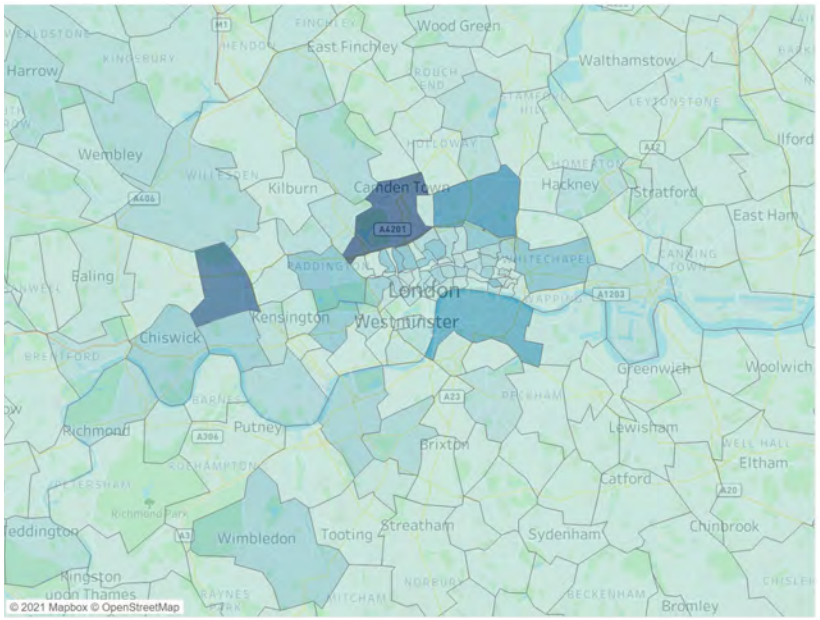
To identify the locations of businesses focused on life sciences R&D in London, investment data and primary research by KTN and Creative Places has been used to create a 'heat map' of activity. The following maps reflect the data found so far.

Fig. 22: Heatmap of R&D-intensive healthcare companies in London



Source: KTN and Creative Places

Fig. 23: Intensive clustering in central north London around Euston Rd and Kings Cross and a hot spot out at White City. Also evident is an indication that districts to the west appear to be stronger than those further out to the South, East and North.



Source: KTN and Creative Places

SUPPLY LEVEL NOW

Current stock is near to full

Many life sciences businesses can operate from office property and can thus locate almost wherever it suits them, but in London there is a significant, core group requiring wet laboratory space to undertake their work. This increasingly involves specialist manufacturing space, too.

Property that can provide wet laboratory space needs to have adequate service provision and this can be particularly demanding in tightly developed locations, as well as expensive. Industrial property can be adapted to serve the sector better than office property, but office property tends to be better located – so is often the type of property converted to laboratory use in a city like London, even though it may deliver less than ideal space. Into the future it may be that retail property will see conversion work too.

Looking at property that is delivering wet laboratory space, or capable of it and being promoted as such, today all current stock is full or very close to this. A pipeline of conversion/ new build is now starting to feed its way into the supply side. [See Appendix, figs. a & b].

Creating small-scale suites of flexible laboratory space

Lack of availability of small-scale suites of wet laboratory space is an ongoing problem. This has typically required grant funding in the past and there is little of this available in London today.

The London Cancer Hub initiative has managed to secure a contribution to create 6,000 sq ft at Sutton, alongside the Royal Marsden hospital, but this will make only a very small impact on the overall demand/supply imbalance. Wealthy benefactors, large international corporates, or Chinese university initiatives (such as that of Tus Holdings) may help ease the pipeline, but the offer of space may be in exchange for a stake in SME IP, and in practice public subsidy may be required before projects can actually be delivered. However, new models for SME workspace are emerging (See Fig, 24, overleaf). Open Cell has pioneered delivery of very affordable space in shipping containers, for example. A model like this may need to evolve using more permanent structures for future sustainability to be ensured.

Other models now being explored include cross-subsidised development within larger projects, Local Authorities using their own landholdings or planning controls, or successful scientists in the communities taking risks that may ultimately lead to sustainable business space delivery. We would stress, though, that some level of public sector subsidy may be helpful. From a public sector perspective, such modest contribution may be an attractive proposition given the significantly leveraged outcomes that would result.

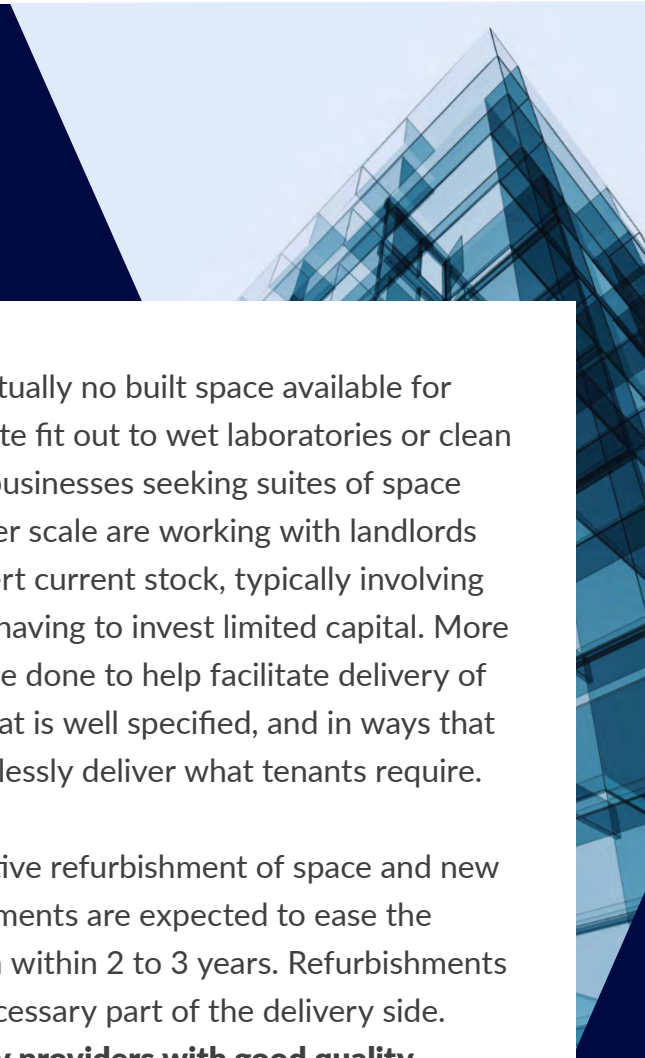
Fig. 24: Delivering affordable, specialist workspace for SMEs

Stakeholders in the UK's Life Sciences innovation ecosystem appear to be growing in their willingness to make bold commitments.

Emerging new models	Example	What it requires
1 Large private sector developments providing small-scale suites to bring vibrancy and dynamism that will attract in bigger stakeholders	Imperial White City Incubator	Sufficient critical mass and wider agendas of promoters that can effectively justify activity that may contribute very little financially
2 Local Authorities using landholdings, planning direction and Section 106 Agreements to secure affordable workspace	Initiatives by progressive councils like Camden and Islington that are still 'work in progress'	Commitment to a balance of affordable workspaces that may cater for various communities, and care on implementation
3 Successful scientists and business creators looking to build space for the community, potentially at their own cost but with the aspiration of ultimately making the initiative sustainable	Unit DX in Bristol that has now gone on to become Science Creates	Relatively wealthy or well-connected individuals with passion for the sector to work with stakeholders in a confident and risk taking manner

Where others can provide modest support this can make a significant difference to encourage such work.

CONCLUSIONS



London is a powerhouse for life sciences research and R&D. It is particularly strong in some of the key growth areas for the sector into the future. Importantly, as well as being internationally accessible, it is strategically located within the UK as a hub where transport routes converge. As such it plays a pivotal role in the way the Golden Triangle is linked, and how the country as a whole works. **London's success in life sciences R&D will have a direct impact on the rest of the UK** and it should therefore not only have the umph put behind it with the 2021 Roadmap but should also be a key plank in the government's levelling up endeavour – driven as a major contributor to the country's wealth and well-being.

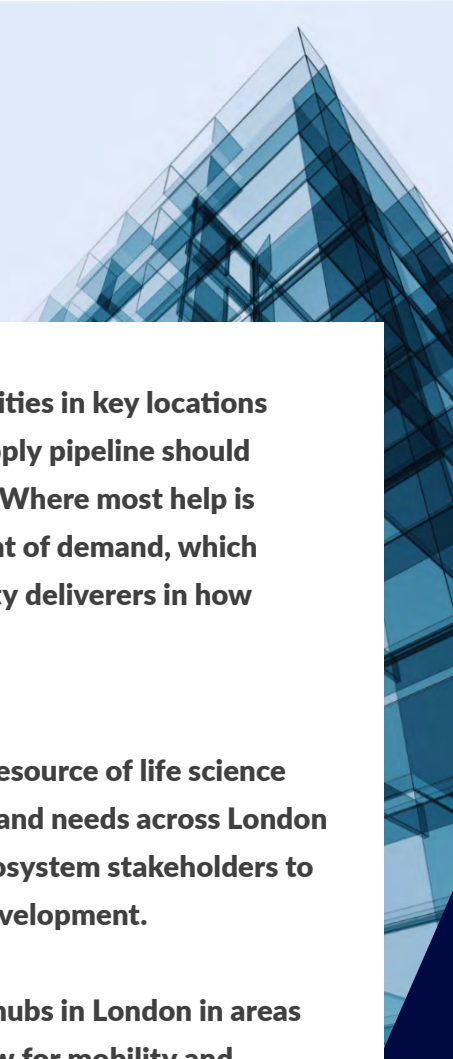
Demand for specialist floor space to serve the sector exceeds supply in London. **Queues to get into innovation centres are stifling the ability of small-scale ventures to grow.** It is vital that further endeavour is put into providing affordable space that can accommodate newly forming companies and support early-stage incubation, in the very best locations. They indicate that if rental levels are high, they will locate in more remote locations – remote from the academic and clinical interface that may well be important life blood to them in their early years.

With virtually no built space available for immediate fit out to wet laboratories or clean rooms, businesses seeking suites of space at a larger scale are working with landlords to convert current stock, typically involving tenants having to invest limited capital. More should be done to help facilitate delivery of space that is well specified, and in ways that can painlessly deliver what tenants require.

Speculative refurbishment of space and new developments are expected to ease the situation within 2 to 3 years. Refurbishments are a necessary part of the delivery side. **Property providers with good quality product in desirable locations will win through, but not all will fall into this category.**

With the sector embracing flexible working and a desire within its participants to find ways that deliver real added value when teams come together, and when commutes into London are invested in, we have uncovered a real appetite for building 'community' space around Kings Cross/ Euston Road and at hotspots where leading academics and clinicians are working – where **interface with thought leaders and relevant community participants can turbocharge productivity and competitiveness.**

RECOMMENDATIONS



Whilst London is short of space, the property industry and the Local Authorities in key locations within London have identified the opportunity to grow the sector so the supply pipeline should start to ease in forthcoming years. Short term constraint is clearly evident. Where most help is now required is in directing the property industry as to the nature and extent of demand, which this study starts to identify; and in supporting Local Authorities and property deliverers in how best to provide for what businesses need.

1. **Create more specialist space with operational facilities for early-stage life science SMEs by leveraging the planning framework. Locate these spaces in key London locations alongside accelerator and incubation programmes.**

2. **Develop a roadmap for landlords and developers on building small scale manufacture to support the delivery of flexible, adaptable laboratories and clean rooms that are licenced and fit for purpose. Utilise the expertise of the Cell and Gene Therapy Catapult to build the roadmap via a working group that includes real estate developers and city planners.**

3. **Create a dynamic resource of life science R&D demand, activity and needs across London that can be used by ecosystem stakeholders to optimise real estate development.**

4. **Build networking hubs in London in areas of high demand to allow for mobility and collaboration between innovators, clinicians, researchers, investors and developers within life science clusters in London and nationally.**

5. **Ensure London remains a leader in attracting and growing life science talent by fostering partnerships between higher education institutes and industry that deliver a strong supply chain in skills for the future.**

IMPLEMENTATION: MedCity will hold recommendation-specific roundtables with stakeholders across our ecosystem over the next six months to agree how the five recommendations can best be actioned to meet demand and continue the growth of the life science sector.

APPENDIX

Fig a. Examples of developments being considered/promoted for the Life Sciences sector in London (data compiled by Creative Places)

SCHEME	NATURE OF ADDITIONAL DEVELOPMENT	POTENTIAL SIZE (SQ FT NET)	SPACE POTENTIALLY AVAILABLE FROM	STATE OF PLAY	SPACE POTENTIALLY AVAILABLE WITHIN 3 YEARS (SQ FT NET)
King's Cross/Euston Road					
Tribeca Site, St Pancras Way (Reef and BA Pension Fund)	Redevelopment to create a mixed-use project and where the Life Sciences is to be the lead use	500,000 (beyond Apex Building already on site)	2024	Developer looking at ability to accommodate laboratory space as part of the development. Planning permission granted. Development start times dependent on securing VP	218,000 sq ft in Reflector, in addition to the Apex Building where construction is already underway
Network Building, Tottenham Court Road (Derwent)	Redevelopment in one building	112,000 sq ft	2025	Detailed planning permission granted	0
St Pancras Hospital (Argent)	Mixed use redevelopment of former hospital site that could provide space for Life Sciences activity	100,000	2025	Not yet with planning permission	0
British Library Site (Stanhope and Mitsui Fudosan)	New development that will provide space for the British Library and Alan Turing Institute and which also has the potential to create space for Life Sciences Occupiers	550,000 (420,000 sq ft levels 2 to 7, plus 130,000 sq ft offices in levels 8 to 10)	2029	Design work underway following time spent agreeing Cross Rail 2 access. Planning application submitted	0
Regent's Place (British Land)	Range of refurbishments and redevelopment possible across this estate	1 million sq ft plus	2023	Campus being re-positioned to serve innovation and Life Sciences. Individual consents to be pursued for various refurbishments/redevelopments	100,000 sq ft through refurbishment
Total		2.262 million sq ft			300,000 sq ft
White City					
Imperial College White City Campus, Wood Lane	New academic and student as well as commercial floor space planned	500,000	2025	Outline permission exists for development on land acquired by ICL.	0
TFL Land, Wood Lane (TFL)	Site of underground/rail stations where there is potential to deliver development above or close to the stations	200,000	2026	Potential to introduce commercial space over the stations which given proximity to Imperial College activity might entail space for Life Sciences	0
White City Place, Wood Lane (Aircs and Stanhope and Mitsui Fudosan)	Potential further capacity could be delivered alongside White City Place development, part from space now under development, part from new build	600,000 – 500,000 sq ft of which is through new build	2022	First building (Gateway Central) 50% let to L'Oreal and remainder may be let as offices or possibly in part as wet laboratory space. Planned adjoining buildings available for rent and could potentially be wet laboratories	100,000 sq ft through fit out of space under construction at Gateway Central, available Q4 2022.
Shepherd's Bush Market area redevelopment (Yoo Capital)	Land has accommodated Open Cell container initiative to start to seed the location. Redevelopment planned	250,000	2024	Master plan and planning consent need to be finalised	7,000 sq ft of containers for modest laboratory use available in the short term
Total		1.55 million sq ft			207,000 sq ft

Other London locations

London Cancer Hub (London Borough of Sutton)	New development alongside the Institute of Cancer Research and Royal Marsden Hospital	1 million sq ft	Pilot innovation space under construction and then 2026	The site has been acquired by Sutton Borough Council. They and their partners ICR and the Royal Marsden Hospital may progress mixed use development so potentially delivering say half the million sq ft originally aspired to	0
Royal London Hospital, Whitechapel (Dept of Health and Social Care plus others)	Space physically alongside the Royal London Hospital and close to research/teaching and SME activity built up in the area	750,000	2026	Government land not yet in the hands of a developer/delivery partner and no planning consent. Some additional property may be used to bring forward Life Sciences space too	0
Stratford, Olympic Park, IQL site (Lendlease)	Potential for delivery of wet laboratory space alongside growing UCL and other education/innovation activity	1 million sq ft +	2025	Outline planning permissions granted for offices only at this point	0
Guy's Hospital environs (Guy's & St Thomas' Foundation plus others)	Development potential on sites alongside and very close to the hospital	1 million sq ft +	2025	Various properties being considered around Guy's, who themselves are looking to make some small-scale space available for early occupation	15,000 sq ft
St Thomas's Hospital environs (Guy's and St Thomas' Foundation in partnership with Stanhope, plus others)	Development alongside expanded hospital activity	1 million sq ft	2024	One plot currently being advanced with Stanhope that may deliver another 300,000 sq ft at Royal Street, alongside new hospital space.	350,000 sq ft
King's Hospital, Denmark Hill	Potential for development of property as part of GSTT/King's College Hospital/KCL/KHP Innovation District initiative with Lambeth and Southwark councils	100,000 sq ft	2026	Aspiration to grow mental health research and R&D activity - Translational Medicine Hub. Various property owners have individual properties that may be suitable for Life Sciences uses and an element of this may include wet laboratory space	0
Paddington St Mary's Hospital Redevelopment	Potential for delivery of space alongside a redeveloped hospital	1.5 million sq ft	2026	Redevelopment of the St Mary's Hospital, run by Imperial College Healthcare Trust, could release land for development, part of which could be for wet laboratory space alongside the clinical activity	0
Canary Wharf	Re-purposing of office space and development of new lab space	3 million sq ft	2024	Potential to link up with St Barts Hospital and deliver space at scale	500,000
Cavendish Square	Re-modelling of an underground car park for Life Sciences related activity	100,000 sq ft	2025	Various health related uses being explored by developer Reef	0
		9,450,000 million sq ft			**865,000 sq ft**

Fig b. Current laboratory supply in London

Innovation Centres

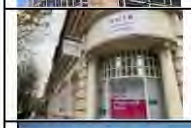
	Project Name	Location	Hospital Proximate?	Commercial Space (Net)
	Imperial White City Incubator	White City. Translation and I-Hub, 80 Wood Lane. W12	Not far from Hammersmith Hospital	18,000 sq ft wet laboratory and office ALL FULL
	London Bioscience Innovation Centre	Camden/Kings Cross. 2 Royal College Street. NW1	Close to St Pancras Hospital where Moorfields is to relocate to	27,000 sq ft wet laboratory and office ALL FULL
	Queen Mary Bio-enterprises Innovation Centre	Whitechapel. 42 New Road. E1	Close to Royal London Hospital	39,000 sq ft wet laboratory and office plus 5,000 sq ft of office/dry lab space in a new extension now available for letting. ALL LABORATORY SPACE FULL
			Total	**89,000 sq ft**

Existing properties with wet laboratories and involving multi-occupancy (beyond innovation centre space). Further delivery may be difficult to realise.

	Project Name	Location	Hospital Proximate?	Space fitted or potentially suitable for wet lab use (net)	Description/Comments
	Imperial White City Campus Translation and Innovation Building (iHub)	White City. 80 Wood Lane. W12	Not far from Hammersmith Hospital	70,000 sq ft excluding the incubator covered above, occupied by Life Sciences businesses. A further 20,000 sq ft may become laboratory use, vacant and available to be fitted out now	A variety of specification types from shell and core to fully fitted labs. Space has been created for wet laboratory activity at levels 1, 2, 3 and 7. All occupied. Additional space has modest capacity to deliver wet laboratory space
	Scale Space, Imperial White City Campus	White City. 58 Wood Lane. W12	Not far from Hammersmith Hospital	40,000 sq ft of which 30,000 sq ft is occupied and another 10,000 sq ft is vacant and available to be fitted out now	Blenheim Chalcott delivered space. Initially targeted at Digital Tech businesses but now rebalancing to include more Life Science activity
	WestWorks and MediaWorks, Wood Lane	White City. 195 Wood Lane. W12	Not far from Hammersmith Hospital	60,000 sq ft now occupied by businesses that have fitted the suites to include wet laboratory space	Former BBC office space, part of which has been converted to provide laboratory accommodation. Mix of occupiers from Media and Fashion but have attracted a good number of Life Sciences businesses
	LondonEast-UK	Dagenham. Yew Tree Avenue. RM10	No	50,000 sq ft of wet laboratory space but area available ranging significantly over time and appears to be diminishing	Former Sanofi space now being reconfigured for various uses and non-Life Sciences activity appears to be in the ascendency
	Rolling Stock Yard,	King's Cross. 188 York Way. N7	No	40,000 sq ft of an office building that is being converted for wet laboratory use, the landlord working with 2 Life Sciences businesses	An office building that the landlord has worked with wet laboratory end user occupiers to facilitate conversion of space into laboratory use. Gyroscope have taken 2 floors
	Open Cell	Shepherd's Bush. Old Laundry Yard. W12	No	7,000 sq ft of basic laboratory facilities plus shared facilities. Delivered through the use of shipping containers. All occupied	Pioneering pilot scheme to establish affordable wet laboratory suites from 160 sq upwards on very flexible terms. Only available at the location until the site is redeveloped
			Total	**287,000 sq ft of which 30,000 sq ft is vacant**	

Fig b. continued

Existing buildings with potential capacity for wet lab creation and being promoted for Life Sciences use now – not a full list of those with capability

	Project Name	Location	Hospital Proximate?	Potential floor space (Net)	Description/Comments
	5-10 Brandon Road	Islington. Brandon Road. N7	No	114,000 sq ft	Site with industrial space that has planning permission for a new mixed use commercial centre. New owner Kadans will bring forward GMP manufacturing, laboratory and office space.
	85 Gray's Inn Road	King's Cross. Gray's Inn Road. WC1	Great Ormond Street Hospital proximate	27,000 sq ft	Planning application should go in shortly. Refurbishment planned and with space ready for occupiers to move into in 2022.
	Former RNIB Property, Judd Street	Kings Cross. Judd Street. WC1	No	40,000 sq ft	Planning consent required for existing building to be extended to 70,000 sq ft +. Façade retained but 3 new levels and new core envisaged. Envisaged scheme would support wet labs over up to 50% of the building.
	The Refinery	Hammersmith. Manbre Wharf. W6	No	123,000 sq ft	Property is being marketed as having scope for each floor to be fitted out for laboratory use.
	2 Redman Place	Stratford. IQL. E20	No	40,000 sq ft	Top 2 floors of a building that has accommodated Cancer Research UK.
	London Cancer Hub	Sutton. Cotswold Road, Belmont. SM2	Adjoins the Royal Marsden Hospital	6,000 sq ft	Fitted space being created as a shared laboratory facility. Space currently being delivered by Sutton BC in a repurposed existing building alongside the Institute for Cancer Research and Royal Marsden Hospital. Due to open late 2021.
			Total	**350,000 sq ft, all available to let**	

Property under construction and with wet laboratory potential (to varying degrees)

	Project Name	Location	Hospital Proximate?	Proposed Commercial Space (Net)	Description/Comments
	Scale Space Extension, Imperial White City Campus	White City. 58 Wood Lane. W12	Not far from Hammersmith Hospital	40,000 sq ft	Space will be ready for fitting out early 2022
	The Apex Building, Tribeca	Kings Cross. St Pancras Way. NW1	Yes Alongside St Pancras Hospital (part to be redeveloped for Moorfields Hospital)	112,000	Scheduled for completion in Q1 2023. Will be part of an overall scheme of 6 new buildings that may provide a total of circa 750,000 sq ft of Life Sciences space)
			Total	**152,000 sq ft, all available to let**	

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The London Life Sciences Real Estate Demand Report has been made possible thanks to the support of the following:

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SCALE SPACE

ACKNOWLEDGEMENTS

We are very grateful for the support of the companies and organisations who helped bring this report to life, and we would like to thank the many the many individuals who took time to provide their insights and perspectives to contribute to the study.

In particular we would like to thank: Jonathan Burroughs, Amelia Crawley, Maryam Atakhorrami and the team at Creative Places. We are very grateful for the engagement and input from OneNucleus, SEHTA, Digital Health. London, the Cell and Gene Therapy Catapult.

IN MEMORY OF PHIL JACKSON

Our respected colleague Phil Jackson passed away earlier this year amid the planning for the 2021 Demand Report, and we would like to take this opportunity to acknowledge his contribution in kickstarting the process that has led to this publication. Phil was an enthusiastic advocate for the building of appropriate infrastructure for the companies whose daily R&D activity results in eventual healthcare breakthroughs — we hope this report will enable meaningful change to support their work.

ABOUT MEDCITY

MedCity represents the life sciences cluster for London. We boost innovation and investment in the region, securing the UK's position as a global science superpower.

Working in close partnership with London's world-leading universities, MedCity connects private industry with partners in the NHS, charity sector and research institutes to catalyse exciting new opportunities that advance cutting-edge R&D in areas such as AI, diagnostics, and rare diseases. MedCity builds collaborations to accelerate uptake of medical innovation and growth across the UK. We help policymakers understand what life sciences requires to thrive in a competitive international landscape.

www.medcityhq.com
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ABOUT CREATIVE PLACES

Creative Places works to help create business environments that enhance innovation and enterprise. A consultancy/agency practice working with those involved with education, research, R&D, upskilling and work practices that build productivity through place and community development. Creative Places is active across all sectors requiring science and technology in product development and has a particular strength in the Life Sciences.

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MEDCITY

MD2949 Appendix 4

IMPACT REPORT
2021

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CONTENTS

A LETTER FROM OUR CEO

Neelam Patel
CEO, MedCity

In 2021, despite a global pandemic and the impact of Brexit, MedCity has generated GVA of £12.4 million, more than 12 times the amount of public funding we received.

Agile ways of working have enabled us to surpass expectations by delivering a significant return on public investment in our quest to grow life science innovation and investment in London, securing the UK's position as a global science superpower.

Our impact in other areas has also been tangible: measuring and reporting demand for R&D space to better inform supply; connecting life sciences companies with investors and with R&D collaborators in universities and the NHS; working closely with other clusters to spread investment and healthcare innovation; championing sustainability and showcasing the green scientists in our London cluster who are helping to forge a net-zero future.

All this is made possible through our people — those in our core team, our extended team members at the Academic Health Science Networks, our management and advisory boards with their incredible combined knowledge, and countless others in the ecosystem, from academic leads to angel investors, with whom we work closely week by week to help life sciences entrepreneurs grow their innovations and their business.

I would like to take this opportunity to thank everyone who has worked with us to deliver impactful results to the life sciences economy and healthcare landscape. In this report, we celebrate both our achievements for the year, and the talented people who have made it possible.

Funded by:

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European Regional Development Fund

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IMPERIAL COLLEGE HEALTH PARTNERS

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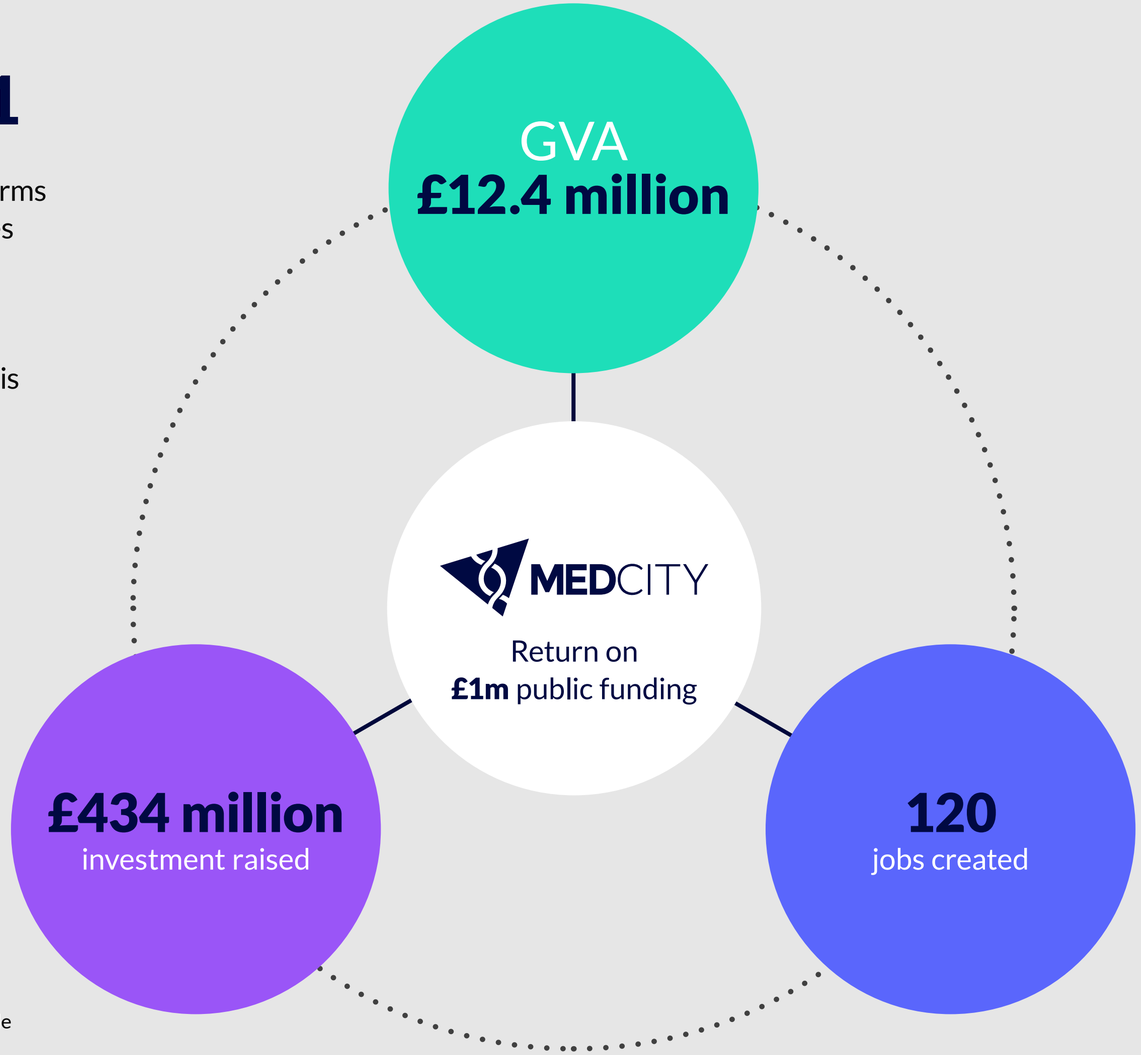
An Academic Health Sciences Centre for London
Pioneering better health for all

OUR ECONOMIC FOOTPRINT IN 2021

Our team is small but our impact in economic terms is significant across three core KPIs: Life sciences jobs created, GVA generated, and investment raised this year by the companies we have supported through our programmes. This only tells the story of our measurable activity. There is much more that we do to impact on the success of the sector, laying the foundations for further economic growth and healthcare innovation.



Our team:

6.8 people (FTE)

Our per capita impact:

GVA £1.82 million

17.6 jobs

£63.8 million investment raised

Figures explained, clockwise from bottom right: Jobs created over 12 months through programmes MedCity supported and FDI (contestable & non-contestable); Investment raised this year by our programme alumni; GVA at £10 k per job (PwC industry calculation).

OUR IMPACT ACROSS THE ECOSYSTEM IN 2021

Innovation

21
research collaborations enabled and funded

Investment Hub

£675k
investment raised from 4 pitch events

Collaborate to Innovate: Stroke Association

£175k
funding for three research projects

Collaborate to Innovate: Advanced Therapies

£1.5m
funding for 12 advanced therapies

Digital Health.London Accelerator with DH.L

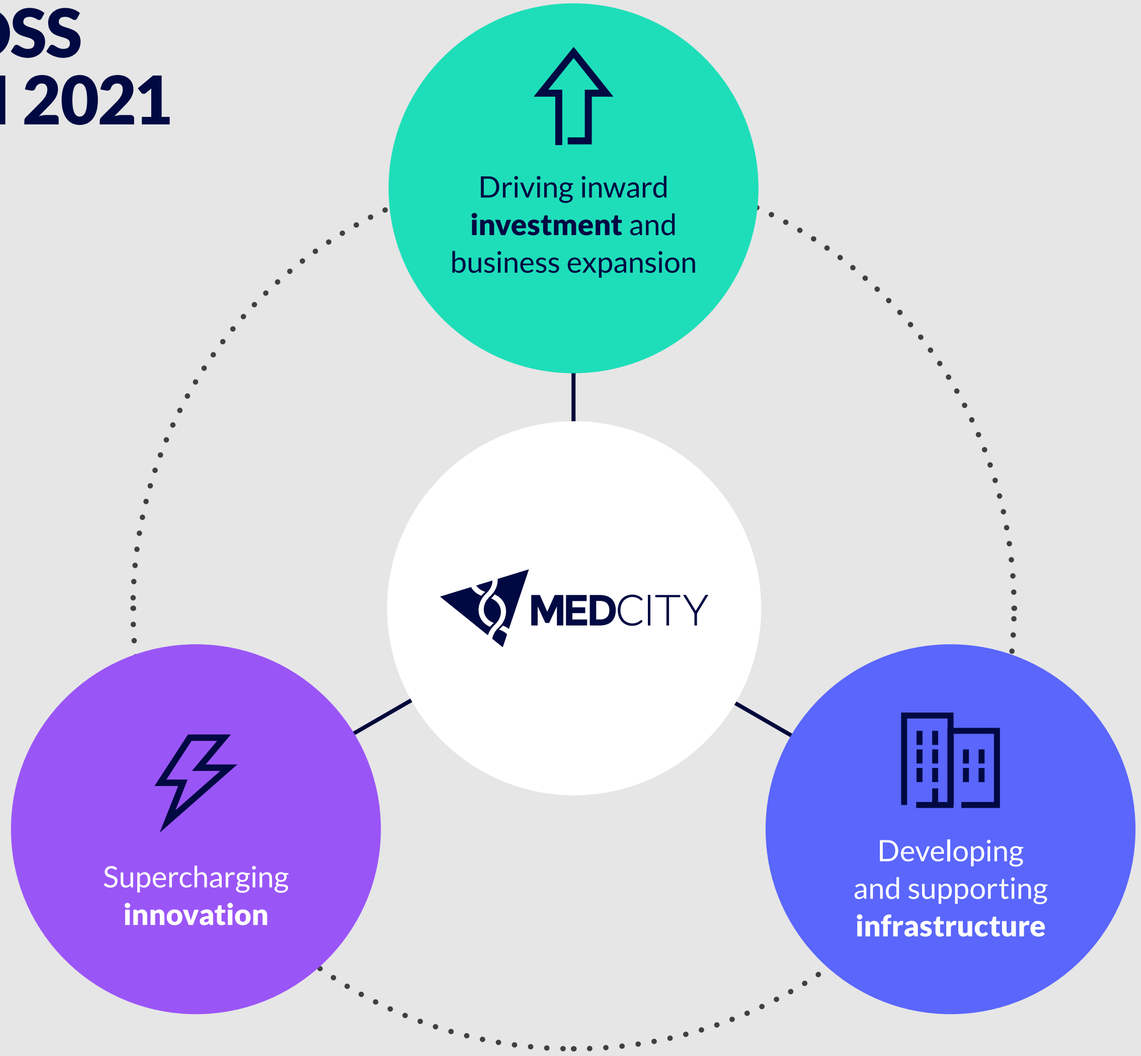
50
new NHS contracts

22
NHS pilots

Healthcare Sustainability

27
ground-breaking 'net zero' projects showcased

894t
reduction in CO_2 emissions by showcased pilot projects



120
life science jobs created

148
FDI jobs (contestable) over the past 6 years

168
industry clients supported 2021

1400+
industry clients supported *(cumulative 2016-2021)*

900+
people reached globally through our events

12,000+
people reached through our comms

100+
companies surveyed on need for life sciences real estate in London

400%
increase in demand documented in Real Estate Demand Report

£1bn+
life sciences real estate planning supported

800+
new jobs in life sciences forecast

OUR MOMENTUM ACROSS THE YEAR

JAN 2021
Testing Alliance new lab

A new COVID testing lab is completed for the London Testing Alliance. The lab will be used by the HSL and UCL partnership to process up to 10,000 tests a day.
Read more

FEB 2021
Diagnostics innovator programme

Funding is agreed with and LEAP for a new 12-month programme, Collaborate to Innovate: London Diagnostics.
Read more

MARCH 2021
Generating digital health evidence

MedCity rejoins the panel for the second series of Generating Evidence for Digital Health webinars.
Read more

APRIL 2021
£545k SME investment

Charco Neurotech's Lucy Jung announces funds secured through the Investment Hub to develop a device for Parkinsons' patients.
Read more

MAY 2021
Advisory board welcome

This month we welcomed new advisory board members, joining our existing members in bringing diversity and an exceptional breadth of knowledge and experience to MedCity. Read more

JUNE 2021
Data & AI report

We launch a joint report with London & Partners on the UK capital's position as a global innovation hub for Data & AI in health and life sciences.
Read the report

JULY 2021
NHS criteria development

We work with NHS England and NHS Improvement's national IAPT team on the development of assessment criteria for digitally enabled therapy products.
Read more

AUG 2021
Investment Hub call

Early-stage healthcare companies seeking capital are invited to apply for our virtual Autumn pitch event to angel and VC investors
Read more

SEPTEMBER 2021
Investment call for med-tech & digihealth SMEs

In partnership with Spex Capital we launch a global call for healthtech innovators seeking seed and Series A.
Read more

OCTOBER 2021
London R&D space demand report

Five years on from our seminal 2016 study, we uncover a fourfold rise in the real estate needs of life sciences SMEs in London. Read the report

NOVEMBER 2021
Biomarker matchmaking

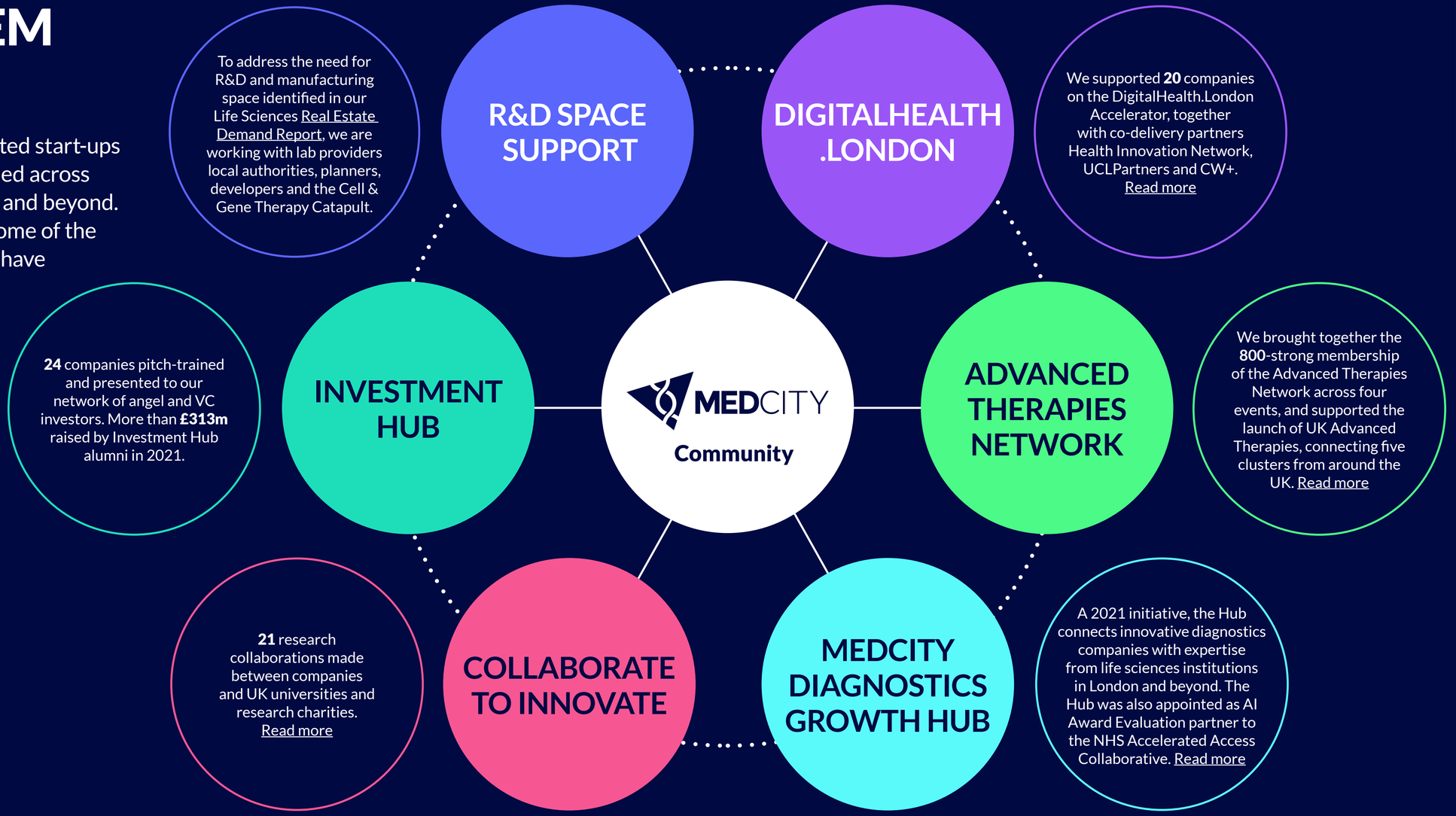
The first of our Biomarker Matchmaking events brings together industry and researchers to stimulate biomarker discovery.
Read more

DECEMBER 2021
Unleashing innovation

Our publication showcases innovations in the London ecosystem that are moving the healthcare sector toward a greener future.
Read the report

OUR ECOSYSTEM OUTREACH

Through our work in 2021 we connected start-ups and SMEs with the support they needed across the life sciences ecosystem in London and beyond. On the following pages we highlight some of the innovation journeys those companies have made with help from MedCity.

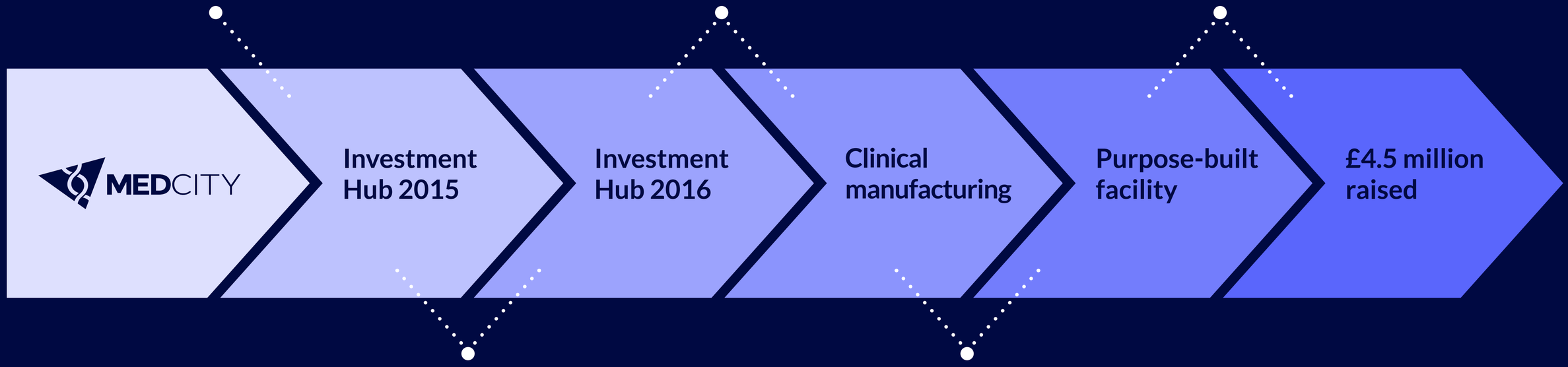


CASE STUDIES

INNOVATION PATHWAYS THROUGH MEDCITY

ELECTROSPINNING COMPANY
Harwell, Oxfordshire | Biomaterials

After raising capital twice through MedCity's Investment Hub, Electrospinning Company is scaling up its technology platform for biomaterials used in implantable tissue-regenerative devices.



CASE STUDIES

ELECTROSPINNING COMPANY: INVESTMENT HUB ALUMNUS

Designing and manufacturing biomaterials for regenerative medical devices.

Watch CEO Ann Kramer explain the technology

An alumnus of the MedCity Investment Hub in 2015 and 2016, The Electrospinning Company designs, develops and manufactures nanofibrous biomaterials for use in tissue-regenerative devices. The company was established in 2010 as a spin-out from the UK Science and Technology Research Council. A decade later, the team has an innovative technology platform and is developing products in a range of therapeutic applications, including orthopaedics, ophthalmology and cardiovascular, with a number of medical device clients. It is manufacturing for six products which are in clinical trials and focused on scaling up processes.

In May 2021 the company received an injection of £4.5m investment in a round led by US-based Confluent Medical. The investment provides a partnership opportunity for the two companies, allowing Electrospinning's proprietary electrospinning process to expand design options in the structural heart market and fully automate the process of attaching biomedical textiles to heart valve frames.

In addition to supporting client projects, the company is developing materials for cell therapy and for wound healing including in ophthalmology. The Symatix® membrane is designed to mimic the Human Amniotic Membrane, which is increasingly used as a surgical bandage but yet to overcome the cost and variability drawbacks of human tissue-derived material.

"Thanks to the early support from MedCity's Investment Hub, together with other angel and venture networks, we have been able to build a technology platform ready to scale as novel materials gain commercial traction in the field of medical devices."

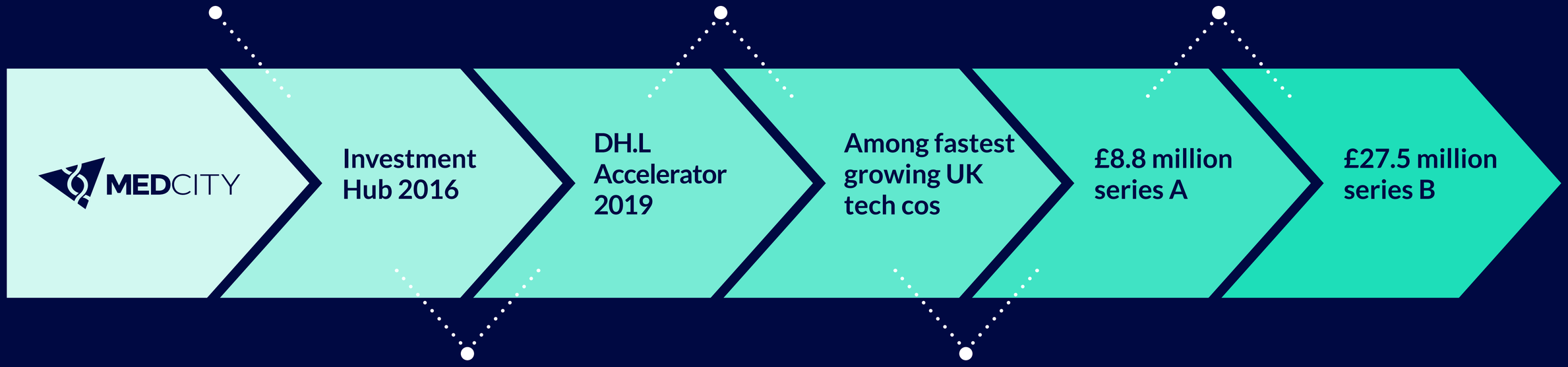
– Ann Kramer, CEO

CASE STUDIES

INNOVATION PATHWAYS FROM MEDCITY

ACCURX
London | Digital Health

Co-founders Jacob Haddad and Laurence Bargery raised seed funding through the Investment Hub, and accuRx has since grown to become one of the UK's most widely used digital health providers.



CASE STUDIES

ACCURX: INVESTMENT HUB & DIGITAL HEALTH.LONDON ACCELERATOR

Communication tools connecting patients and GPs

AccuRx is one of the UK's fastest-growing health tech start-ups. Six months after founding their venture in 2016, co-founders Jacob Haddad and Laurence Bargery raised capital through MedCity's Investment Hub, successfully completing a seed round of £150,000. With further support from MedCity and delivery partners on the Digital Health.London Accelerator in 2019, the company grew from 40 test practices to over 2,250 and raised £8.5 million in Series A. By February 2020, accuRx was being used to communicate with patients asynchronously, bringing efficiency gains to 50% of GP practices. AccuRx had also started working on improving communications between general practice and secondary care.

Over 98% of GP practices are now using accuRx to communicate with patients and other healthcare staff involved in their patients' care — 60% of the population has been messaged using accuRx (over 38 millions patients) and 130,000 staff use accuRx each week to communicate with their patients. In November 2020, it became clear that the Covid-19 vaccine programme would take a tremendous effort across all parts of the healthcare system. The team pivoted their focus to support the programme and built bespoke software (accuBook) in less than four weeks to allow GPs to schedule clinics and invite patients to book their vaccination appointments via SMS, based on cohorts. Since December 2020, over 28 million Covid vaccines have been managed via accuRx.

The company's recent £27.5 million Series B funding round will facilitate the growth of the accuRx team, enhancing its offering to GP practices and building products that will enable expansion into secondary care.

"MedCity's Investment Hub was a brilliant networking initiative that enabled us to meet investors right at the start of our journey. This was fundamental in starting to form our team and gave us the means to build our first product."

– Jacob Haddad, Co-founder

CASE STUDIES

INNOVATION PATHWAYS FROM MEDCITY

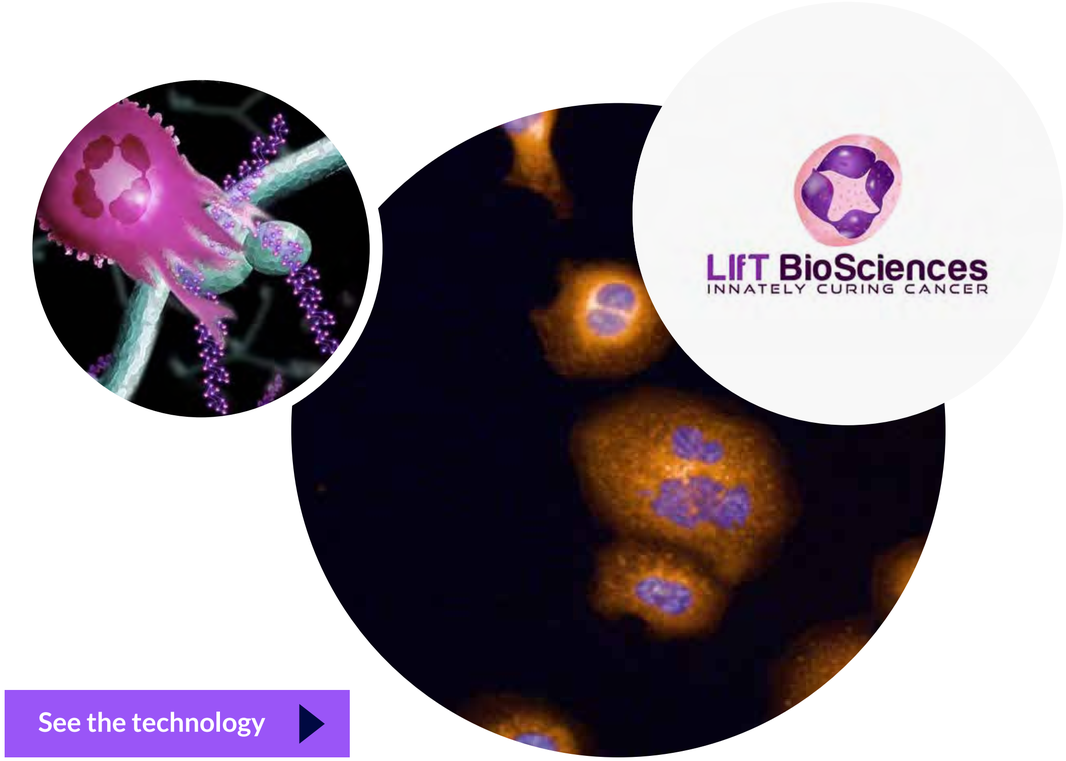
LIFT BIOSCIENCES
London | Immuno-Oncology and Stem Cell Therapy

Pioneering a cancer treatment using cancer survivor cells, LIfT has progressed its groundbreaking therapy through research enabled by MedCity's Collaborate to Innovate programmes.

CASE STUDIES

LIFT BIOSCIENCES: COLLABORATE TO INNOVATE

Breakthrough cell therapy for pancreatic cancer



See the technology

LIfT Biosciences is a pre-clinical biotech bringing to market an off-the-shelf cell therapy, N-LIfT, which has the game-changing potential to work across a wide range of solid tumour indications, irrespective of mutation or strain. The cell therapy works by taking the stem cells of a donor carrier for a special type of neutrophil and then mass producing these cancer-killing neutrophils for use in patients. By adding induced pluripotent stem cells in the production stage, the breakthrough cell therapy can be made off-the-shelf, cost efficiently.

LIfT was accepted on to our first Collaborate to Innovate programme for Broad Life Sciences in 2017. During the research collaboration the team made a world first breakthrough, showing that human neutrophils produced in the lab can kill cancer cells. This enabled Lift BioSciences to get data for their first patent and secure £2 million seed funding.

In June 2020, LIfT joined our second Collaborate to Innovate for Advanced Therapies. Founder Alex Blyth formed a research collaboration with Dr. Davide Danovi at the Centre for Stem Cells & Regenerative Medicine, King's College London. They made a major breakthrough in demonstrating successful tumour infiltration for both pancreatic cancer and NSCLC in mice. According to Alex, "Biotherapeutics are notoriously expensive and precarious to bring to patients. However, the potential benefits can be huge. We are now told we could be a decacorn company for investors with a potential cure for solid tumour patients, but none of this would have been possible without MedCity's early support."

"For us MedCity has proven to be the most useful organisation in early-stage UK biotech, providing a much needed bridge between SME and universities, and between idea and proof of concept to secure seed funding rounds."

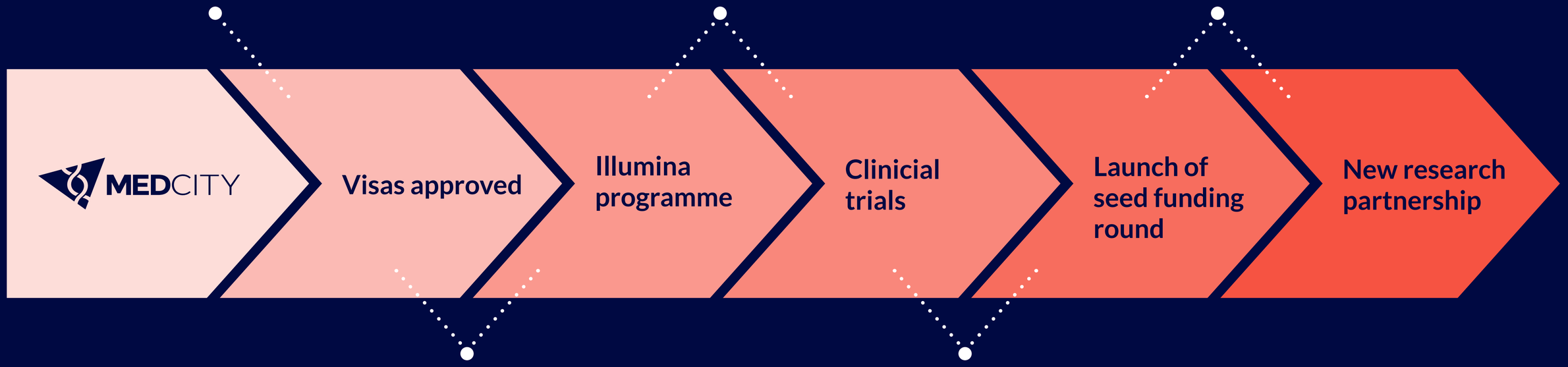
– Alex Blyth, Founder

CASE STUDIES

SUPERCHARGING INNOVATION: PATHWAYS FROM MEDCITY

MULTIPLAI
From Buenos Aires to London | AI & Genomics

The Argentine start-up relocated to London to develop technology that converts RNA in the blood into an image for algorithmic analysis, enabling universal screening for cardiovascular diseases.



CASE STUDIES

MULTIPLAI: INWARD INVESTMENT & SCIENTIFIC TALENT

Universal genomic screening for cardiovascular disease

The founders of MultiplAI were first introduced to MedCity in October 2020 via video call from Buenos Aires. They were determined to move to the UK to progress their technology for whole blood screening using RNA sequencing and AI to detect virtually any complex diseases, including cardiovascular disorders and cancer. MedCity involved MultiplAI in informational and networking events such as the Advanced Therapies Investor Showcase and a development round table for the Diagnostics Growth Hub.

MedCity endorsed start-up visas for the three founders, allowing the visas to be fast-tracked so that MultiplAI could take up an offer to join the Illumina accelerator in March 2021. Through the validation of Illumina, MultiplAI raised £500k, growing from 3 founders to 11 employees. The company is now raising a £3.5 million investment round and building a scientific advisory board.

Since engaging with Illumina, Multiplai have shifted their R&D to focus on addressing the unmet need for effective diagnostic screening and prognosis in the massive cardiovascular disease space. They aim to show that the whole-blood RNA blood signature can be used to accurately and affordably diagnose cardiovascular risk far more effectively than existing approaches that use decades old technology.

“MedCity has been there since day one as the endorsement body for our startup visas and our guide around the ecosystem. The timing of our Company of the Month distinction with World Heart Day was ideal, and now we are also thrilled to be working with Queen Mary’s on the Collaborate to Innovate programme.”

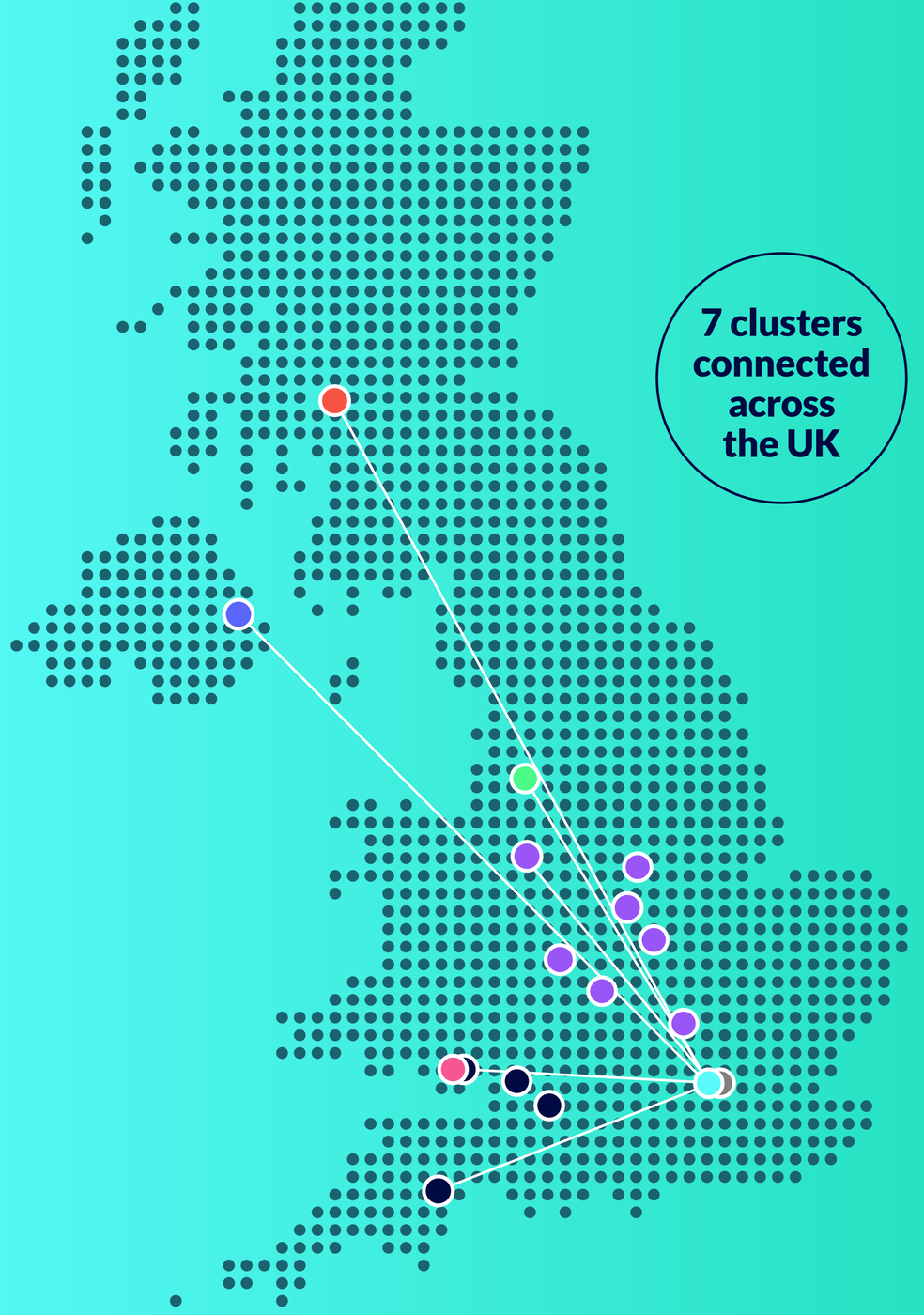
– Mark Ramondt, Co-founder

CONNECTING CLUSTERS

Engaging the network of life science clusters across the UK, we worked together to represent the UK globally, and connected companies with research capabilities and investment. Our joint report with NHSA and HIRANI demonstrated the potential of clusters.

Read the report

- **MedCity** [London]
- **Northern Health Science Alliance (NHSA)** [North of England]
- **GW4 Alliance** [University of Bath, University of Bristol, Cardiff University, University of Exeter]
- **Health Innovation Research Alliance (HIRANI)** [Northern Ireland]
- **Life Sciences Hub Wales** [Cardiff]
- **Midlands Innovation** [Birmingham, Leicester, Loughborough, Nottingham, Keele, Cranford, Warwick]
- **NHS Research Scotland** [Clydebank]



“These hubs of research, development and innovation play an essential role in delivering the UK’s world-leading research and driving its translation into benefits for society.”

– Professor Sir Robert Lechler PMedSci, Emeritus Senior Vice President (Health) at King’s College London

DEVELOPING CLUSTERS

– MSD Discovery Centre
– British Library Extension, St. Pancras

Since MedCity was founded in 2014 as the life sciences cluster organisation for London, we have identified infrastructure as a critical element in determining the success of the life sciences sector.

Getting life sciences infrastructure right is not just about building real estate in desirable locations near hospitals, research facilities or universities. It requires sustainable architecture, design, engineering and metrology; provision of wet labs, dry labs and other types of work space proportionally aligned to sector needs; and facilities to nurture the surrounding community and generate meaningful jobs. This continued to be our focus in 2021, as we convened industry, investors, local authorities and space providers to help develop the built environment for life sciences.

MedCity's former head of cluster development, Phil Jackson, who sadly passed away in March 2021, was a motivating force behind MedCity's role in advising property developers about the needs of life science companies; representing the life sciences sector to government agencies and policymakers; and informing pharma and biotech on where to locate to maximise geographical benefits and proximity requirements. MedCity was pivotal in identifying the site of MSD's new Discovery Research Centre in King's Cross and in supporting planning applications.

We were also instrumental in cementing the ground-breaking partnership of The British Library with Japanese multinational developers, Mitsui Fudosan, and UK developers, Stanhope Plc, to develop unused space at the library's Central London site. MedCity has a long-standing relationship with Japanese life sciences and helped connect Tokyo-based Mitsui Fudosan with The British Library to enable the £1.6bn project. The 800,000m^2 development will provide commercial space for scientific companies and organisations, including the headquarters of the Alan Turing Institute, the national centre for data science research.

The publication of our 2021 London Life Sciences Real Estate Demand Report articulated the urgent need for R&D space among life science companies of all sizes in the capital. It found that demand had grown fourfold since our 2016 study into life sciences real estate. Covid-19 and Brexit appeared to have little dampening effect, with 82.5% of the 100-plus companies we surveyed saying that they needed space due to expansion. Record investment into the sector has fuelled this expansion – 2021 was a bumper year for life sciences investment, with the amount of public and private financing increasing 60% over 2020, and London IPOs jumping 434% from the previous year.

Despite an overwhelmingly positive narrative around life sciences R&D and clarity on what businesses want, space constraints remain a potential barrier to success, in London and beyond. To tackle this challenge we are taking forward recommendations from the report, while supporting Local Authorities and property deliverers in how best to provide for what businesses need.

Read the report

MEDCITY LAB PROVIDERS' FORUM

As a first step in addressing the immediate needs of companies searching for scarce R&D real estate, we have convened MedCity Lab Providers' Forum. A collective of providers across London, and within commuting distance of London, the forum provides a neutral, one-stop shop for life sciences companies looking for R&D space.

Find out more

R&D REAL ESTATE PROJECTS SUPPORTED BY MEDCITY

800,000 ft²

British Library 'Living Knowledge Project

- St. Pancras
- Adaptable space: office, wet and dry laboratories
- New home for the Alan Turing Institute
- Educational and skills opportunities for the local community

- Adjacent to the Francis Crick Institute, Europe's largest biomedical research institute and one of the worlds largest genomic centres

£10m

GSK AI centre

- King's Cross Knowledge Quarter
- A research base using artificial intelligence (AI) to find new treatments for cancer and other diseases
- Collaborations with tech experts worldwide including NVIDIA

1m ft²

Reef Group Tribeca development

- King's Cross Knowledge Quarter
- State-of-the-art laboratory and life sciences work space for the biotech cluster

£1bn

MSD UK discovery centre

- Kings Cross
- 220,000ft²
- 800 clinical researchers and office staff

- Adjacent to Google

500,000 ft²

demand for R&D space identified in MedCity 2021 Life Sciences Real Estate Demand Report

Read the report

Read the blog

MEET THE TEAM

The expertise and dedication of our team members enable MedCity to deliver impact across all our areas of work, and we continue to foster talent through our internship programme.

ALEXANDRA BLACK
Communications and Marketing Manager

CHRISTINA PAPADAKI
Market Analyst

IVANA POPARIC
Head of Cluster Development

KATARINA VARGOVA
Events and Community Manager

KIM WATSON
Communications Projects Lead

MARIE CREED
Business Administrator

NEELAM PATEL
CEO

NICKI BROMWICH
COO

RIKESH PATEL
Programmes and Partnerships Lead

SAKURA HOLLOWAY
Investment Lead

SARAH BRUCE-WHITE
Programmes and Partnerships Lead

SERENA PROBERT
Business Analyst Intern

TRAVIS WALTON
Digital Communications Officer

REMEMBERING PHIL JACKSON

We were saddened to lose our team member Phil Jackson in March 2021. We take this opportunity to recognise his valuable contribution to supporting cluster development, on which MedCity continues to build.

Find out more

MEET OUR INTERNS

UCL Interns – EDI Project
As part of MedCity's Equality, Diversity and Inclusion (EDI) strategy development, we worked with UCL BASc undergraduates on a Student Consultancy EDI Project, aiming to gain a clearer picture of gender distribution among leadership positions in academic and research institutions.

CLEO GLITHERO

FLYNN KLEIN

MARY McHARG

JAE LAMB

UCL Interns – Life Sciences Community Project
A consultancy project undertaken by final year students of UCL's Bachelor of Arts & Sciences (BASc), the forthcoming report from the group examines how life science clusters benefit communities.

CHARLOTTE OGLESBY

HANNA PRYTHERCH

RITA LIECHTENSTEIN

LOLA KAEPPELIN

Mapping Clinical Trials
A medical student at University of Oxford, Tom is working with MedCity on a heat map of clinical trials.

THOMAS FOORD

MedCity runs an active internship programme.

Find out more

A MESSAGE FROM OUR INTERIM CHAIR

Jo Pisani
Interim Chair of MedCity

As we look ahead to 2022 and beyond, I'd like to take this opportunity on behalf of the team to thank our outgoing Chair Ian Campbell for his contribution to MedCity.

Ian served as Chairman from October 2020 to January 2022, ensuring that MedCity remained at the forefront of life sciences development and innovation in our region amidst the backdrop of COVID-19 Pandemic. We wish Ian all the best for the future.

While celebrating our impact in 2021, we are laying the groundwork for future success. Growing life science innovation and investment in London is a core mission for MedCity. This year we are strengthening the services and programmes we offer to both domestic and overseas companies. As one example, MedCity Diagnostics Growth Hub has brought together world-leading validation, evaluation and commercialisation specialists across London and beyond to draw inward investment and support an innovation pipeline for life-saving diagnostics.

The Hub stands alongside our long-standing programmes, the Investment Hub and Collaborate to Innovate in cutting across the ecosystem to provide connections to investors, research collaborators and translational experts. We will also continue to support delivery of the Advanced Therapies Network and the newly formed UK Advanced Therapies. Our new virtual MedCity Community platform is facilitating peer-to-peer networking and providing bespoke support from our knowledgeable team and our partners. The Community is now growing quickly via the ever-increasing number of companies who wish to plug into the London ecosystem.

To ensure London is able to accommodate companies carrying out vital R&D, we are consulting with local authorities, developers, planners and laboratory providers to aid the delivery of appropriate space so desperately needed. Our Lab Providers Forum is a recent initiative, providing an effective, neutral brokering service for companies to find the right space to grow in London. This is just one focus of our cluster development activity. Another central strand is sustainability, highlighted in our Unleashing Innovation 2021 report. By working closely with the Office of Life Sciences and other key stakeholders, we aim to place London at the forefront of sustainability in healthcare, securing the long-term future of the city's life sciences ecosystem and the UK's position as a green, global science superpower.

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@medcityhq

MEDCITY

MD2949 Appendix 5

MEDCITY EDI REPORT

BASC0023 The Knowledge Economy

2022

UCL

Cleo Glithero Jae Lamb Flynn Klein Mary McHarg

EXECUTIVE SUMMARY

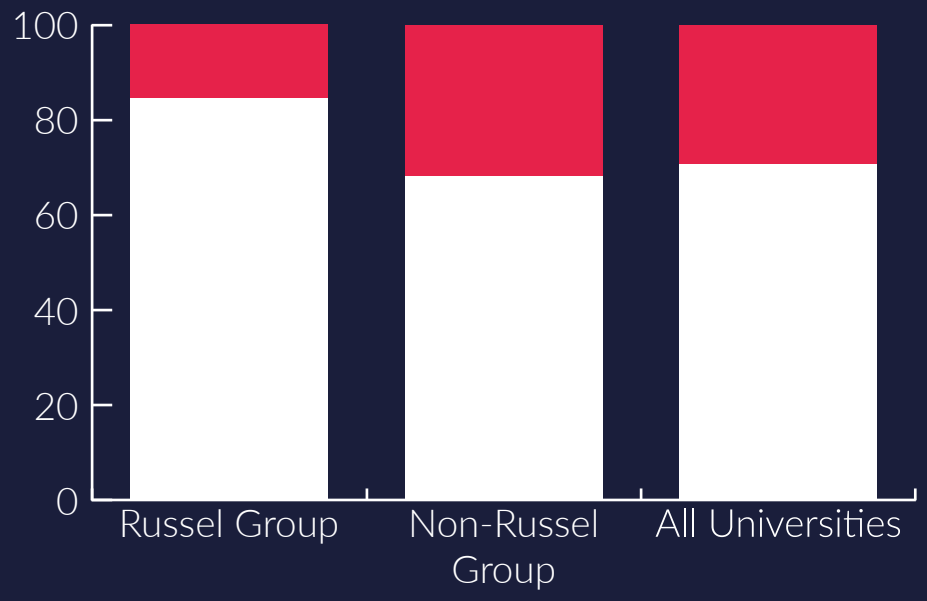
This consultancy report provides support for our client, MedCity, in the launching of their EDI (Equality, Diversity and Inclusion) programme, which serves to address gender inequalities in leadership positions in the life sciences sector. Founded in 2014, MedCity is a London-based organisation representing the city's world-leading health and life sciences cluster. This report sets out to illustrate gender distributions amongst leadership positions in a sample of 24 universities and 353 research institutions in the life sciences sector. In doing so, this report looks to open up conversations surrounding the ways with which the life sciences industry can move closer towards gender parity. The principal findings from our report demonstrate clear disparities in gender distributions, where women occupy significantly less leadership positions than men.

Running parallel to MedCity's EDI programme, this report champions the values of equality, diversity and inclusion - we conclude with a series of proposals which will enable institutions in the life sciences sector to increase opportunities for discussion and positive change.

354
life science companies from the Greater London Area in the sample

Of the overall sample of companies, women make up an average of 18% of leadership positions in Life Science companies, with little difference between sectors.

In universities, for every woman in a leadership position, there are 2.5 men on average. In companies, it's closer to 3.7.



Russell Group Universities have almost 1:6 women to men in leadership positions, compared to 1:2 in non-Russell Group Institutions.

As the name suggests, the life sciences are a vital part in our ongoing personal and public health and wellbeing. Just as vital is it, that people are able to access the same quality of care, tailored to their individual needs. All the more disheartening is it to see that there are clear gendered biases in life science practices - empirical data is either 'gender blind', or uses men as the unversal patient and benefactor of life sciences (Ruiz-Cantero and Verdú-Delgado, 2004; Verdonk et al., 2009).

These biases are also credited to be the reason for the continued underrepresentation of women in STEM and the life science industry (Moss-Racusin et al., 2016). Although the life sciences are comparatively well balanced, positive change has been slight. In 1993, 38% of people employed in the life sciences were women (National Science Foundation (NSF), 2013, Table 9-2 and 9-3), creeping up a mere 6% in 26 years, to 46% in 2019 (NSF, 2019, Table 9-2).

The mutual influence of scientific bias and employment means the most actionable approach to ensure life science equity is to focus on gender imbalances in life science leadership (after all, it is unlikely that this report will undo most fundamental patriarchal conditioning in research and treatment). In this project, we investigate the distribution of men and women in leadership positions across life science companies and academic institutions in the Greater London Area.

Project Outline

Starting with a literature review we set out to illustrate the context and motivation for the project, as well as its importance. The intricacies of the desk-based research are outlined in the Methodology section, which also considers the limitations and difficulties encountered in our data collection and analysis. The findings are divided into London's academic institutions and life science companies, just as further analysis is done for individual sectors within the life sciences. Finally, we use our findings to put forwards possible approaches that further MedCity's mission to champion diversity and equity.

INTRODUCTION

To have a global snapshot of the issue of gender equality in the life sciences sector and to better understand the challenges in 'supporting women to attain and remain in leadership roles' (Rhodes, 2019), we conducted a literature review to see whether gender inequality in the life sciences exists, and if so, why, and the ways with which gender diversity affects scientific research.

Beeler et al. (2019) looked at over 500 institutions from 38 countries over a 4 year timeframe, and found that while women were well represented in undergraduate and graduate student populations, the representation of women decreased significantly amongst senior scientist positions; furthermore, it was found that 'nearly one-third of institutions reported that less than 10% of their tenured faculty recruits were women.' (pg. 307) The underrepresentation of women in leadership roles is echoed in many other studies, such as a 2018 report by the Royal Society of Chemistry, which 'provided evidence that just 9% of chemistry professors in the United Kingdom are women' (pg. 2), signifying a '35% decrease in female chemists in the transition from undergraduate study to senior scientist positions in academia' (pg. 2). The lack of gender parity in senior levels of scientific research can be attributed to a myriad of societal problems, including, but not limited to: 'academic funding structures, academic culture, gender-based cultural responsibilities.' (pg. 2) This is further explored in studies which focus on the behavioural impetus behind gender inequality in the life sciences sector. In a study which discusses the role of power motivation on men and women, and whether these differences in motivation level 'contribute to unequal distribution of women and men in leadership positions', (Schuh et al., 2014: pg. 363), Schuh et al. found that men consistently scored higher than women in self-reported levels of power motivation, and that the presence of increased power motivation in men 'is one route that fosters the higher proportion of male leaders', accounting for about '26% of the total relation between gender and leadership role occupancy.' (pg. 376) Sociological perspectives on gender parity shed light on the psychological and structural challenges that women face both within and outside of the work environment. Therein lie extensive challenges, not only those faced by women in life sciences industries, but also for those attempting to obtain positions in the sector, which further complicates endeavours to break the glass ceiling.

Feminist approaches to how gender diveristy affects scientific research have highlighted the positive implications and necessities of gender parity in the life sciences sector. In relation to climate change and developmental policy, a study conducted by Dankelman (2002) explicates the significance of women's contributions surrounding sustainable development issues and 'demonstrates how women's participation can translate into more gender-sensitive outcomes' (pg. 21), because women are more likely to contribute to 'analyses of gender aspects of specific areas (...) bringing the concept of sustainable livelihoods and habitat aspects to the local, national and international agendas.' (pg. 27) In a similar vein, Nielsen et al. (2017) further outline the importance of gender parity in group performance, and found that groups with higher levels of equal gender distribution, which enabled 'group members' social perceptiveness and parity in conversational turn-taking' (pg.1741), scored higher in collective intelligence than

single-gender groups. Nielsen et al.'s study provides strong evidence for how 'gender diversity may also spark new discoveries by broadening the viewpoints, questions, and areas addressed by researchers.' (pg. 1741)

Taken together, this literature review has corroborated the distinguishable imbalance between men and women in the life sciences sector, which is even more prominent in the transition from undergraduate study to senior levels of research positions. Additionally, sociological and feminist perspectives on the matter have illuminated the underlying challenges faced by women looking to advance in the sector, which prompts the question of what academic funders, recruiters, and current members of the industry can do to create a culture and working environment where women can obtain the same opportunities as men do now. The positive implications of gender parity in the life sciences industry are manifold and we should all be committed to harnessing 'the power of gender diversity for collective innovations and discoveries.' (Neilsen et al., 2017: pg. 1742).

METHODOLOGY

The scope of this project consisted of desk-based research of publicly available sources. In order to gain insight into the gender distribution amongst people in leadership positions within the life sciences sector in London, we needed to gather data from both academic institutions and companies specialising in the field.

Our approach to determining gender was modelled on the methodology used by the Oxford Brookes University Centre for Diversity Policy Research and Practice in their report on Gender Diversity in Oxfordshire Innovation/Knowledge Based Companies (Manfredi & Still, 2021) as recommended by our client. Through this, the gender of senior leadership members was determined through self-identification as represented by the pronouns used in their biographies (she/her or he/him), their name and title, as well as visual recognition. We acknowledge the limitations of this method for determining gender diversity, but given the constraints of desk-based research of publicly available sources, it was the only possible approach.

Academic Institutions

Our approach to researching gender distribution in academic institution leadership teams comprise the following. Firstly, we compiled a list of all London based universities and research institutions using information from StudyLondon (2021) and University League Tables available online. Next, we excluded all universities without a life sciences department. Research institutions, such as the Institute of Cancer Research, were selected for inclusion in our research providing (1) their research was in the field of life sciences, (2) they were based in London and (3) they offered accredited qualifications in life sciences research such as PhDs and Masters. This resulted in a list of 24 academic institutions (universities and research institutions) in total.

Using information available on each individual institution's website, we compiled data on the gender diversity of their leadership team. Whilst each institution followed the same leadership structure, different institutions used different terminology for their leadership roles. In agreement with our client, we focused specifically on the gender of the people occupying the roles of provost, vice and dean of life sciences faculty (or their equivalent).

To measure the success of academic institutions we considered calculating the impact of each institution's research on the life sciences sector but, unfortunately, we were limited by the inaccessibility of publicly available life science department specific funding information.

Another measure of university success we considered was the number of research publications; however, research paper output numbers and numbers of academics per department were not consistently available across institution life science faculties. As a consequence of these limitations, we decided to use Russell Group recognition status and higher education league table rankings as comparative markers of success.

Companies

In order to gain an insight into the gender distribution amongst people in leadership positions within London life sciences companies, we first referred to the MedCity Map which is an interactive tool provided by our client to represent the life sciences sector in England. Using information available in the MedCity Map as a starting point, we filtered the data set to extract a list of life sciences companies in the London area. Given the time constraints of the project, we then focused our research on 5 main segments of the London life sciences sector to provide a snapshot of the gender diversity of leadership in London life sciences companies. As requested by our client, these segments of focus are: digital health, pharma, biotech, medtech and healthcare.

To compile information about the gender diversity of company leadership members, we cross-referenced publicly available information on company websites, the UK Government Companies House database, LinkedIn and press releases. Our approach to determining gender followed the same methodology applied when researching academic institutions, as outlined above in the academic institutions section.

Limitations we faced in our research were related to the variations in company leadership team structure. Our initial definition of senior leadership team involved Founder, CEO, CFO etc. However, many company leadership team structures ranged in sizes and corresponding leadership positions. For instance, not all companies had a CEO or some people would occupy multiple roles.To address these issues, we were

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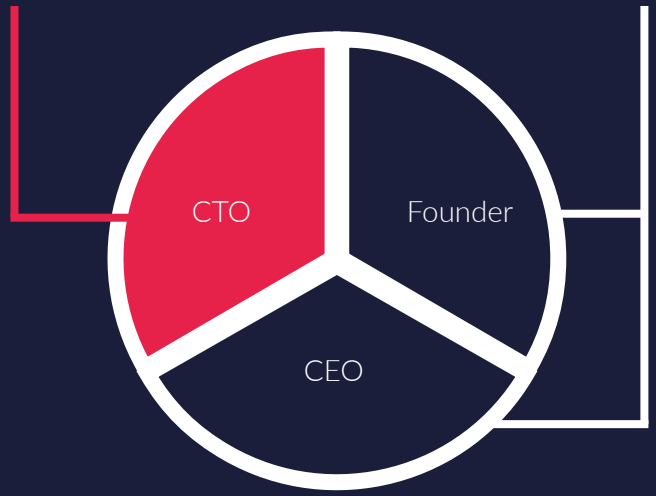
advised by our client to focus our data collection on the top three leadership positions specific to each companies' hierarchy in order to capture the Founder, CEO and CFO or the equivalent position of power in accordance with a company's specific leadership structure.

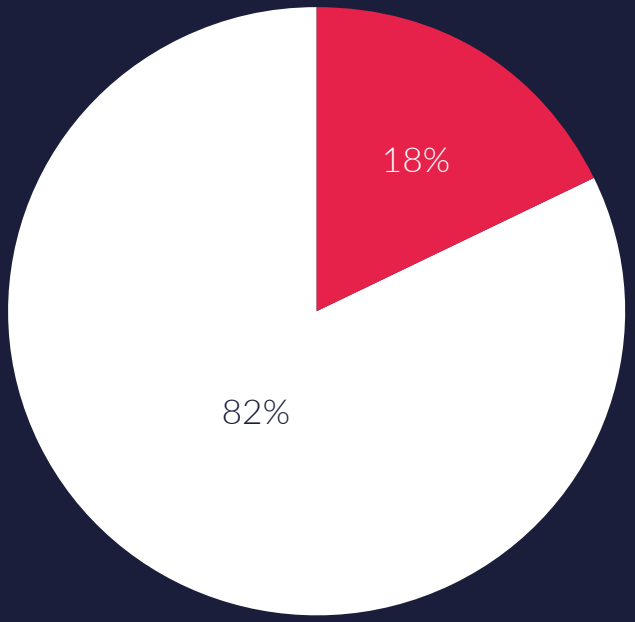
In instances where one person occupied multiple roles, we approached our data collection in a way that would represent this. For example, in the case of the company MediSieve, the senior leadership team is composed of two people who were identified from their biography pronouns as one man and one woman. However, we recorded the data for this company as two men and one woman in order to represent the fact that the man occupied two job roles (Founder and CEO) in comparison to the woman who occupied one (CTO). This was intentional to ensure that the percentage of women in leadership calculated would be representative of the relative duty of responsibilities encompassed by their job roles.

Just as the rankings of academic institutions were noted in our data, we considered measuring and comparing the companies' success in our analysis. However, company success is a very imprecise factor and depends on a multitude of indicators. Even if we were to define a clear measure of success based on size (both in employment and in client-base) or amount of investors, for example, it would not present an equal playing ground between the companies. Like leadership structures, the age and goal of a company and, therefore, the things they place importance on, differ. A company might be small in terms of employees, but reach an international audience. Similarly, a company that was founded 100 years ago might have a large number of investors, but only work with a limited client base, so as to provide tailored and in-depth services. Comparing their success becomes more of a philosophical question, rather than an empirical one.

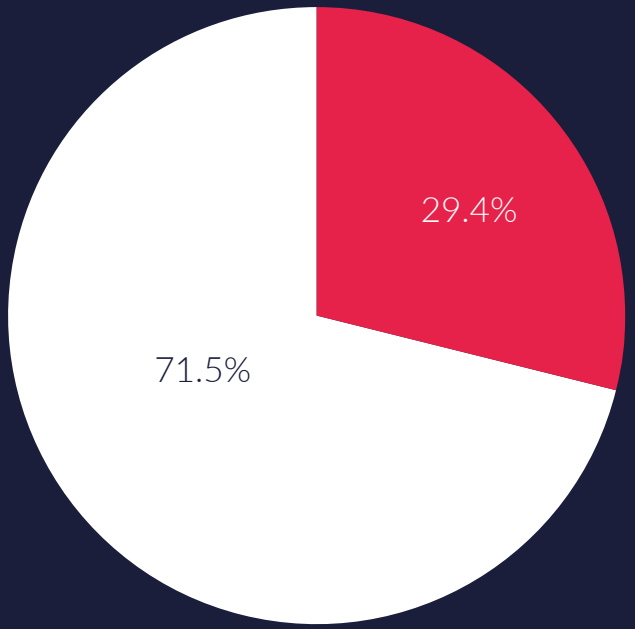


MediSieve Leadership

METHODOLOGY



Life Sciences Company Leadership



University Leadership

Women Men

According to the summary statistics in Table 1, most London-based Life Sciences companies have zero women in leadership positions. Universities and research institutions fare slightly better, with most institutions having one woman in leadership. However, men were a part of every leadership team researched, while women (or other genders) were not. On average, women make up 29.4% and 18.0% of leadership positions in universities and companies respectively. Looking at the standard deviations for the percentage of women in power, 24.4 and 26.3 respectively, most universities and companies have a percentage of women in leadership that does not vary too widely from the average.

FINDINGS AND ANALYSIS

Table 1. Summary statistics for both the Universities Dataset (see Appendix 1) and Companies Dataset (see Appendix 2).

	University Data						Company Data		
	Women	*Men*	*% Women in Leader-ship*	*QS 2021 Score*	*Average Guardian & QS Score*	*Guardi-an 2022 Score*	*Women*	*Men*	*% Women in Leader-ship*
Mean	1.042	2.5	28.542	80.75	65.147	63.593	0.533	2.459	17.969
Median	1	2	33.333	83.25	63.5	63.2125	0	3	0
Mode	1	2	0				0	3	0
Minumun	0	1	0	60.6	46.7	46.7	0	0	0
Maximum	3	5	75	90.2	87.475	85.35	3	3	100
Range	3	4	75	29.6	40.775	38.65	3	3	100
Standard Dev (σ)	0.908	1.103	24.373	11.028	12.759	11.549	0.776	0.794	26.316
Sample Size	24	24	24	24	24	24	353	353	353
Q1	0	2	0	78.4	54.5	54.0375	0	2	0
Q3	1.25	3	37.5	88.625	76.125	72.0625	1	3	3.333
IQR	1.25	1	37.5	10.225	21.625	18.025	1	1	3.333
Outlier Min (IQR)	-1.875	0.5	-56.25	63.0625	22.0625	27	-1.5	0.5	-50
Outliner Max (IQR)	3.125	4.5	93.75	103.963	108.5625	99.1	2.5	4.5	83.333
No. of Outliers	0	1	0	0	0	0	12	13	13

In using the interquartile range to calculate outliers (outliers being data points lying 1.5 IQR below the first quartile and 1.5 IQR above the third quartile), a worrying fact is revealed; in both companies and universities, the existence of an all-female team (or at least, a team featuring no men) would be a statistical outlier. Within universities, a team that is made up of more than 93.75% women is an outlier; within companies, the threshold is only 83.3%. No university teams surpass the outlier threshold (meaning there are no all-female leadership teams within London-based Life Sciences universities), however 13 companies do surpass 83.3% women; the existence of these companies is somewhat promising, but their definition as mathematical outliers only highlights their separation from the norm in the Life Sciences sector.

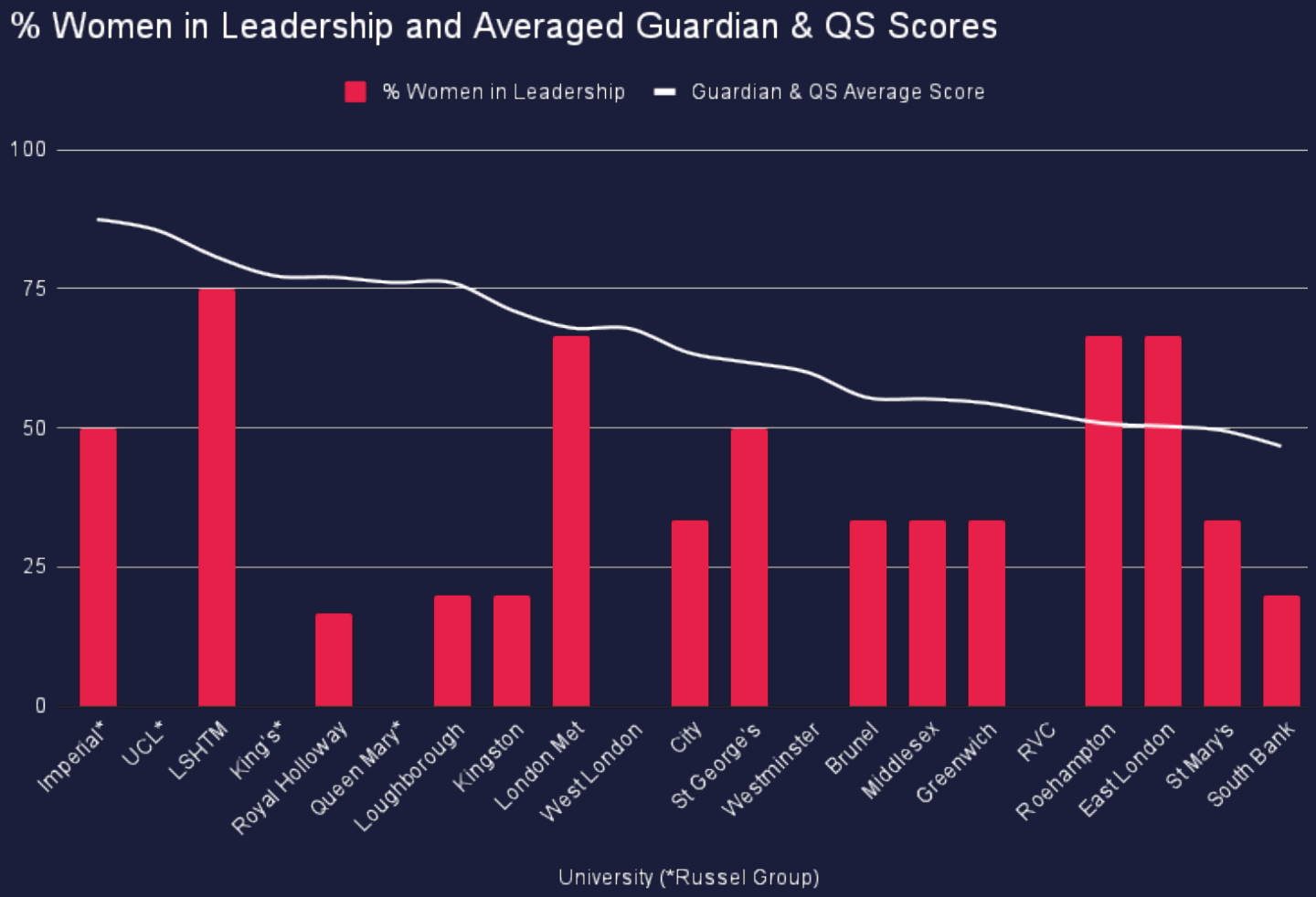


Figure 1. Graph showing the percentage of women in leadership and the averaged Guardian 2022 and QS 2021 score of universities in the dataset (see Appendix 1).

With a Pearson Correlation Coefficient value of -0.16, there is little to no correlation between a university's ranking and the number of women in leadership positions. Notable however are the Russell Group universities within the dataset; of the four, only Imperial's leadership team features women. UCL, King's College London, and Queen Mary all have no women in leadership positions. When comparing London-based Russell Group to non-Russell Group leadership in Figure 2, women make up only 15% of leadership compared to 32%. This means that there are almost 6 men for every woman within Russell Group institutions, compared to 2 men for every woman in non-Russell Group institutions. Across all universities and research institutions, women make up an average of 29.4% of leadership.

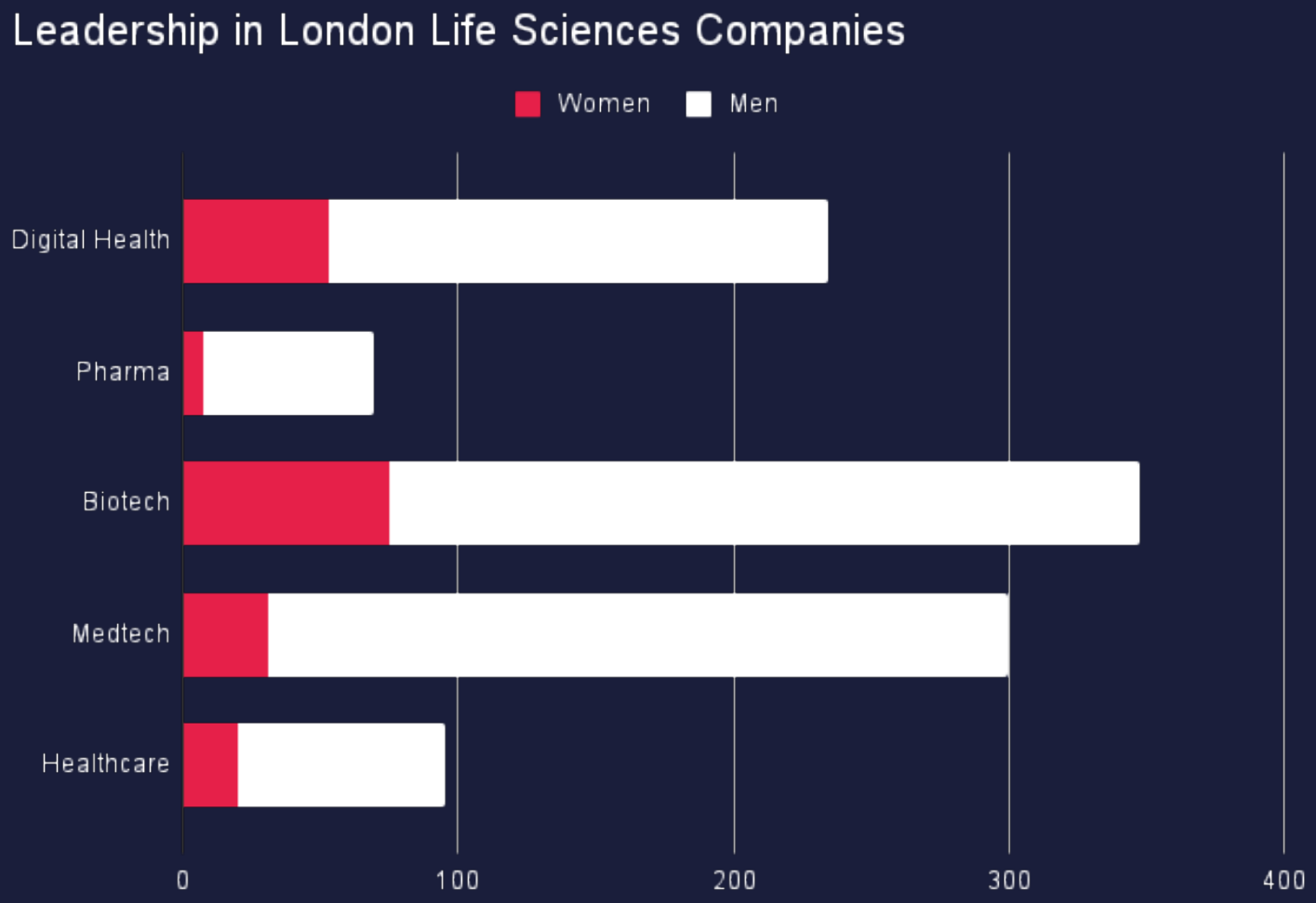


Figure 3. Graph of gender representation in the leadership of London-based Life Sciences companies, divided by sector.

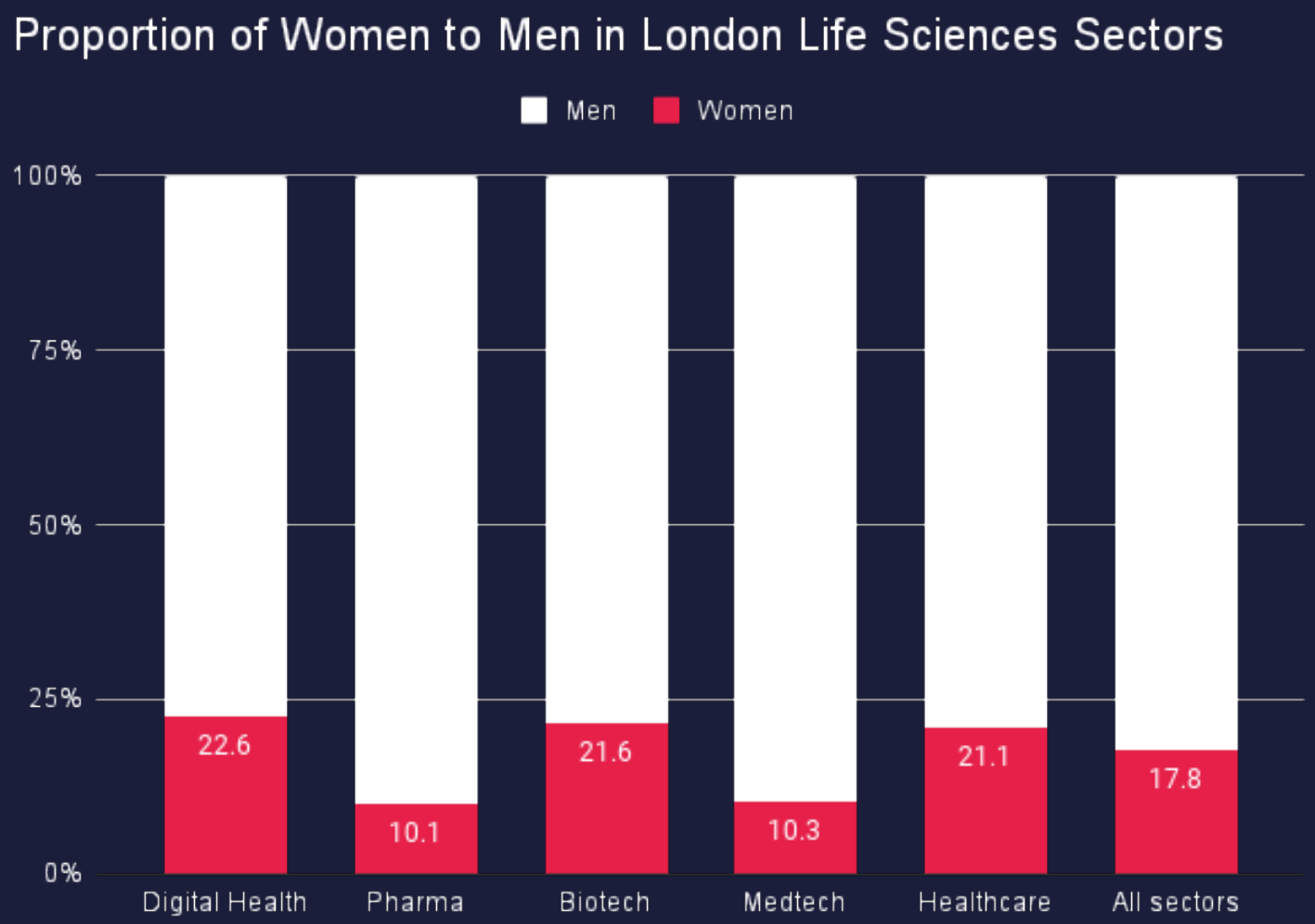
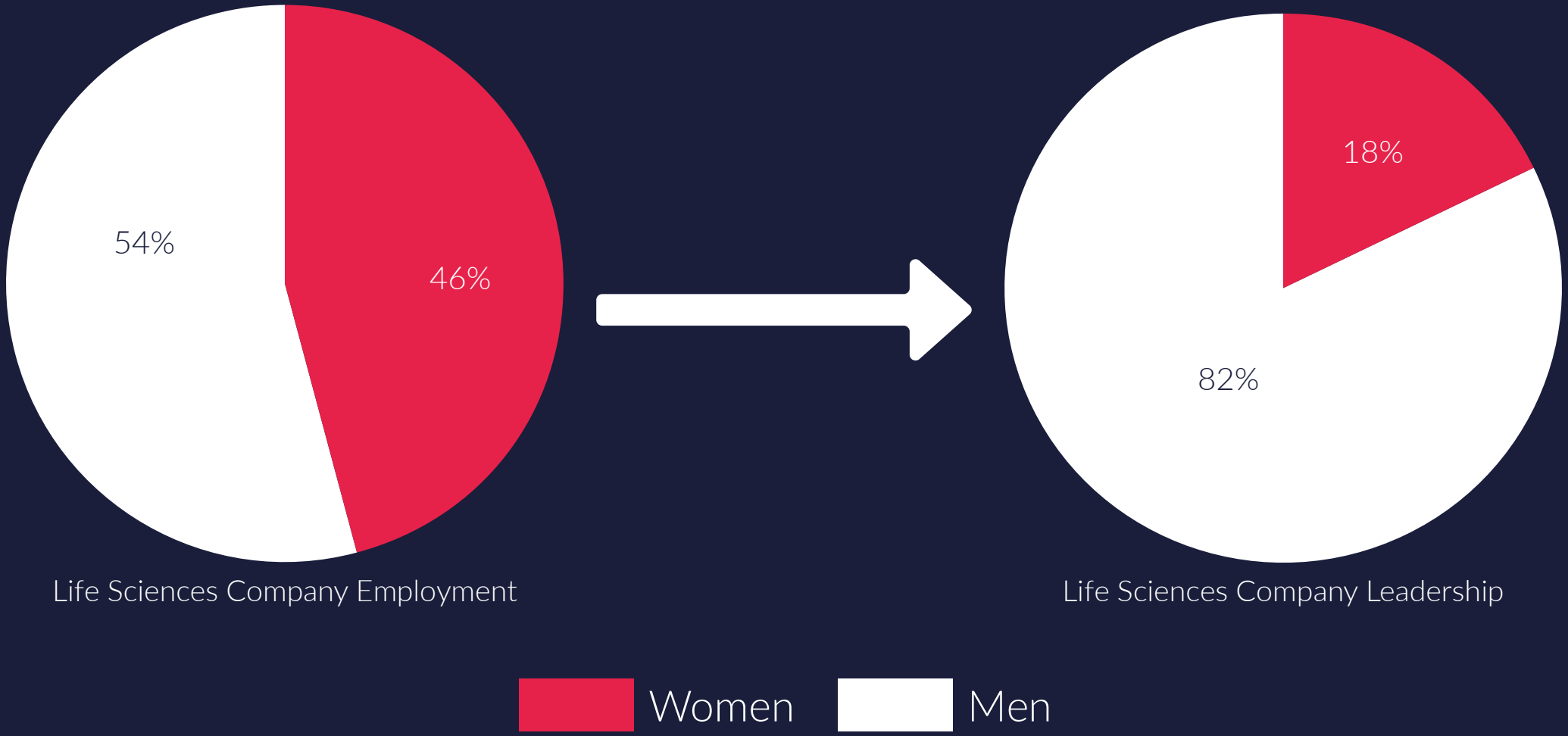


Figure 4. Graph of average gender representation in the leadership of London-based Life Sciences companies, divided by sector.

Within the companies researched, our data covers the following sectors: digital health, pharma, biotech, medtech, and healthcare. Figure 3 illustrates the raw number of individuals researched; most data comes from the fields of biotech and medtech, with the least in healthcare and pharma. When comparing the proportion of women to men in Figure 4, the gender disparity across all sectors is highlighted: women make up an average of 18% of leadership positions in Life Sciences companies, with all individual sectors having less than a quarter of leadership positions held by women. Pharma and medtech in particular have an incredibly low proportion of women in power (10.1% and 10.3% respectively) while digital health, biotech, and healthcare all sit at around twice those values (22.6%, 21.6%, and 21.1%).

Even when looking only at the sectors with the most women in power, the statistics do not line up with those of female employment in the Life Sciences; in 2019, an American study showed that 46% of Life Sciences employees were female (NSF, 2019, Table 9-2). This is not mirrored in our leadership data, showing that despite a rise in female employees, women are not being hired (or promoted) into a proportional number of leadership positions.



NEXT STEPS

How can we further champion Equality, Diversity and Inclusion in the life sciences sector?

Our findings have shown that there are strong gender discrepancies in London's life science leadership, both in the academic institutions teaching future life scientists and informing (inter)national research, and in the companies dedicated to supporting patients and life science workers alike. As illustrated in the literature review, the consequence is a field of study and work wherein women are underrepresented and, thus, struggle to find the respect and care they deserve. Similarly, studies such as have shown that educational intervention programmes have done wonders to both highlight women-specific healthcare issues as well as improve employment chances and quality for women in the life sciences (Moss-Raucisun et al., 2017; Moss-Raucusin et a., 2014; Verdonk et al., 2009).

The subsequent aim of this report is to use its findings to open up discussions surrounding the pursuit of EDI in the ecosystem of academic institutions and enterprises in the life sciences sector. This report can be viewed as a stepping stone in the journey towards gender equality in the workplace and seeks to open up wider conversations regarding topics of gender identity, sexuality, religion and race. In today's contemporary society, the role of intersectionality is as pertinent as ever, and members in the life sciences should be committed to undoing the very racial and gender biases that have marginalised many groups of women in the first place. We have outlined below suggestions for conducting future research on the topic of gender equality in the life sciences, as well as recommendations for strategic interventions, both of which will hopefully bring us closer to achieving gender parity and inclusion.

Future Research

Given the limitations resulting from the constraints of our desk based research of publicly available resources, we propose the following guidance for future researchers:

1. *To conduct self-reporting surveys with companies, where members in their leadership team can self-define their gender identities to avoid any inaccuracies. The survey could also look at factors such as educational and financial background, as well as motivations for working in the life sciences sector to inform future interventions for improving gender diversity. For example, if there is an established link between education attainment and life sciences management, future interventions could be targeted at certain age groups (STEM programmes for adolescent girls, or life sciences management schemes at a graduate academic level) for higher levels of efficacy.*

2. *To work directly with companies to acquire raw data on, but not limited to: the number of employees, annual profits and external funding, salary ranges and other information which is otherwise not freely accessible online.*

3. *To develop a quantitative method of measuring the success of companies, which should take into account a range of socioeconomic aspects, from company profit to social impact. This can be representatively applied to the range of companies within the ecosystem of life sciences.*

4. *To request data from academic institutions on the number of publications produced by life sciences departments over a specific timeframe, and the gender identities of actively researching life sciences academics. This would allow for the proportionate comparison of university departments to others, in relation to an institution's measured research success.*

1. *To discuss the initial findings from this report with investors and enterprises who are interested in the pursuit of EDI in the life sciences sector.*

2. *To take this research a step further by asking individual enterprises and institutions for case studies and additional data, as outlined above.*

3. *To examine current regulations in place to establish more innovative diversity policies to foster less hierarchical and biassed recruitment processes and work environments.*

4. *To introduce gender and diversity awareness programmes, as directed by Moss-Raucisun et al. (2014 and 2017) and Verdonk et al. (2009), in their life science curricula. This will ensure a level playing ground for future generations of life scientists, as well as more robust support for clients.*

Academic Institutions

1. *To request a roundtable at City Hall to review and discuss the impact gender parity has on London's life sciences small and medium enterprises and academic institutions.*

2. *To apply to become a member of EDIS (Equality, Diversity and Inclusion in Science and Health) London, a coalition of organisations working to improve EDI within the science and health research sector, with members including The Crick, Wellcome, GSK, LifeArc, AMRC and others.*

3. *To request a secondary roundtable at CityHall in partnership with EDIS, chaired by Jo Pisani, designed to explore the findings of this consultancy report and to formulate strategic solutions to further gender parity.*

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APPENDIX 1

Universities Dataset

University	Shortened Name	Total Women	Total Men	% Women in Leadership	Russel Group?	Guardian & QS Average Score	Guardian 2022 Average Score	Guardian 2022 Anatomy and Physiology Score	Guardian 2022 Biosciences Score	Guardian 2022 Dentistry Score	Guardian 2022 Health professions Score	Guardian 2022 Medicine Score	Guardian 2022 Nursing & Midwifery Score
Imperial College London	Imperial*	2	2	50	TRUE	87.475	85.35		83.5			87.2	
UCL (University College London)	UCL*	0	2	0	TRUE	85.5875	80.975		84.6			71.1	
London School of Hygiene and Tropical Medicine	LSHTM	3	1	75	FALSE	80.8							
King's College London, University of London	King's*	0	3	0	TRUE	77.33125	68.9625	72.3	78.5	52.4	81.1	68.3	46.5
Royal Holloway, University of London	Royal Holloway	1	5	16.66666667	FALSE	77.1	77.1		72.4				
Queen Mary, University of London	Queen Mary*	0	4	0	TRUE	76.125	74.65	67.1	71.8	57.6		82	
Loughborough University London	Loughborough	1	4	20	FALSE	76.1	76.1		64.3				
Kingston University London	Kingston	1	4	20	FALSE	71.2	71.2		76.7		66.5		73
London Metropolitan University	London Met	2	1	66.66666667	FALSE	68	68		74.7				
University of West London	West London	0	3	0	FALSE	67.85	67.85						63.1
City, University of London	City	1	2	33.33333333	FALSE	63.5	63.5				74		48.2
St George's, University of London	St George's	3	3	50	FALSE	61.7625	62.925		64.1		66.5	48.1	73
University of Westminster, London	Westminster	0	3	0	FALSE	60	60		61.4				
Brunel University London	Brunel	1	2	33.33333333	FALSE	55.475	55.475		49.6		70.3		
Middlesex University	Middlesex	1	2	33.33333333	FALSE	55.22	55.22		36.7		46.3		65.8
University of Greenwich	Greenwich	1	2	33.33333333	FALSE	54.5	54.5		58.8		48		57.4
Royal Veterinary College, University of London	RVC	0	2	0	FALSE	52.65	52.65		60				
University of Roehampton	Roehampton	2	1	66.66666667	FALSE	50.83333333	50.83333333		55.8				
University of East London	East London	2	1	66.66666667	FALSE	50.325	50.325				42.3		
St Mary's University, Twickenham	St Mary's	1	2	33.33333333	FALSE	49.55	49.55		43.5		44.2		
London South Bank University	South Bank	1	4	20	FALSE	46.7	46.7		32.7		46.6		44.6

University	Guardian 2022 Pharmacy & Pharmacology Score	Guardian 2022 Psychology Score	Guardian 2022 Sports Science Score	Guardian 2022 Veterinary Science Score	QS 2021 Score: Life Sciences & Medicine	QS 2021 Score: Agriculture & Forestry	QS 2021 Score: Anatomy & Physiology	QS 2021 Score: Biological Sciences	QS 2021 Score: Dentistry	QS 2021 Score: Medicine	QS 2021 Score: Nursing	QS 2021 Score: Pharmacy & Pharmacology
Imperial College London					89.6		88.4	87.4		90.8		82.6
UCL (University College London)	77.3	90.9			90.2		91.7	87.2	79.4	91.3		88.6
London School of Hygiene and Tropical Medicine					80.8					86.2		
King's College London, University of London	63.1	89.5			85.7		85.1	78	85.8	87.6	94.4	83.9
Royal Holloway, University of London		81.8			N/A							
Queen Mary, University of London	95	74.4			77.6			71.4	78.6	79.6		
Loughborough University London		82.8	81.2		N/A							
Kingston University London	84.1	66.8	60.1		N/A							
London Metropolitan University		62.1	67.2		N/A							
University of West London		72.6			N/A							
City, University of London		68.3			N/A							
St George's, University of London					60.6							
University of Westminster, London		58.6			N/A							
Brunel University London		55.1	46.9		N/A							
Middlesex University		61.5	65.8		N/A							
University of Greenwich		64.7	43.6		N/A							
Royal Veterinary College, University of London				45.3	N/A							
University of Roehampton		62.1	34.6		N/A							
University of East London	54.6	66.8	37.6		N/A							
St Mary's University, Twickenham		66	44.5		N/A							
London South Bank University		50.9	58.7		N/A							

University	QS 2021 Score: Psychology	QS 2021 Score: Veterinary Science
Imperial College London		
UCL (University College London)	89.2	
London School of Hygiene and Tropical Medicine		79.8
King's College London, University of London	85.7	
Royal Holloway, University of London		
Queen Mary, University of London		
Loughborough University London		
Kingston University London		
London Metropolitan University		
University of West London		
City, University of London		
St George’s, University of London		
University of Westminster, London		
Brunel University London		
Middlesex University		
University of Greenwich		
Royal Veterinary College, University of London		97.3
University of Roehampton		
University of East London		
St Mary’s University, Twickenham		
London South Bank University		

APPENDIX 2

Companies Dataset

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Motilent https://www.motilent.co.uk/about/#team	digital health	0	3	0	Male	Male	Male
Regimen https://www.joinregimen.com/about-us	digital health	0	3	0	Male	Male	Male
VUI diagnostics https://www.vuidiagnostics.com/copy-of-media	digital health	0	3	0	Male	Male	Male
Vantage health https://vantage.health/outpatient-transformation/	digital health	0	3	0	Male	Male	Male
S12 solutions https://www.s12solutions.com/team	digital health	1	2	33.33333333	Female	Male	Male
PocDoc+ (managed by vitalsignsolutions - https://www.vitalsignssolutions.com/team)	digital health	1	2	33.33333333	Female	Male	Male
Phlo https://www.linkedin.com/company/wearephlo/people/	digital health	0	3	0	Male	Male	Male
Peppy Health https://peppy.health/about-us/	digital health	1	2	33.33333333	Female	Male	Male
PatientMpower https://info.patientmpower.com/about/	digital health	0	3	0	Male	Male	Male
Patients know best https://patientsknowbest.com/team/	digital health	0	3	0	Male	Male	Male
Oxehealth https://www.oxehealth.com/about-us#our-team	digital health	0	3	0	Male	Male	Male

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Odin Vision https://odin-vision.com/	digital health	0	3	0	Male	Male	Male
Mendelian https://www.mendelian.co/about	digital health	1	2	33.33333333	Male	Female	Male
EXi https://exi.life/about-us	digital health	2	1	66.66666667	Female	Male	Female
Bleepa https://fbkmed.com/about-us/team/	digital health	0	3	0	Male	Male	Male
Feebris https://www.feebris.com/join-us	digital health	2	1	66.66666667	Female	Female	Male
ART healthcare (pshealth) https://pshealth.co.uk/our-team/	digital health	1	2	33.33333333	Male	Female	Male
Concentric health https://www.linkedin.com/company/concentrichealth/people/	digital health	0	3	0	Male	Male	Male
White swan https://whiteswan.org.uk/	digital health	2	1	66.66666667	Female	Female	Male
Vine health https://www.vinehealth.ai/about-us	digital health	3	0	100	Female	Female	Female
Sweatcoin https://sweatco.in/team	digital health	0	3	0	Male	Male	Male
Push Doctor https://www.pushdoctor.co.uk/meet-our-medical-team	digital health	0	3	0	Male	Male	Male
Patchwork https://www.patchwork.health/about/	digital health	0	3	0	Male	Male	Male
Oxford Heartbeat https://oxfordheartbeat.com/about/	digital health	2	1	66.66666667	Female	Female	Male

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Ortus i-Health https://www.linkedin.com/company/ortus-ihealth/people/	digital health	0	3	0	Male	Male	Male
Medicspot https://www.medicspot.co.uk/about	digital health	0	3	0	Male	Male	Male
Lifelight (Xim) https://lifelight.ai/about-us/	digital health	0	3	0	Male	Male	Male
Definition Health https://www.definitionhealth.co.uk/clinical-experience/	digital health	1	2	33.33333333	Male	Female	Male
Ibex Medical Analytics https://ibex-ai.com/company/about/	digital health	0	3	0	Male	Male	Male
EQL Limited https://www.eql.ai/about	digital health	1	2	33.33333333	Male	Male	Female
Edge Health https://www.edgehealth.co.uk/team	digital health	0	3	0	Male	Male	Male
Diabetes Digital Media https://ddm.health/team	digital health	1	2	33.33333333	Male	Female	Male
Birdie https://www.linkedin.com/search/results/people/?currentCompany=%5B%2213441836%22%5D&origin=COMPANY_PAGE_CANNED_SEARCH&sid=goX	digital health	0	3	0	Male	Male	Male
Ampersand Health https://ampersandhealth.co.uk/team-page-wp/	digital health	0	3	0	Male	Male	Male
Visionable https://visionable.com/about-us/	digital health	0	3	0	Male	Male	Male

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Trustedoctor https://trustedoctor.com/about-us	digital health	0	3	0	Male	Male	Male
Trayned Insight https://traynedinsight.com/who-we-are	digital health	0	3	0	Male	Male	Male
Hampton by K2ms https://www.k2ms.com/about-k2/#staff	digital health	1	2	33.33333333	Male	Male	Female
TrackActive https://www.trackactive.co/about-us/	digital health	0	3	0	Male	Male	Male
Synopsis Healthcare https://www.intouchwithhealth.co.uk/about-us/our-team/	digital health	0	3	0	Male	Male	Male
MeeToo https://www.meetoo.help/team	digital health	3	0	100	Female	Female	Female
Lavanya Plus (WeMa) https://www.wearewema.com/who-we-are.html	digital health	2	1	66.66666667	Female	Male	Male
i-GP https://www.i-gp.uk/about-us	digital health	2	1	66.66666667	Male	Female	Male
Healum https://www.healum.com/team	digital health	0	3	0	Male	Male	Male
HN https://www.hn-company.co.uk/about-us/#team	digital health	1	2	33.33333333	Male	Male	Female
Pando https://www.linkedin.com/company/hellopando/people/	digital health	1	2	33.33333333	Male	Female	Male
Doctor Toolbox https://www.dr-toolbox.com/Main/About	digital health	0	3	0	Male	Male	Male

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Islacare https://www.islacare.co.uk/story/	digital health	0	3	0	Male	Male	Male
Thalamos https://www.thalamos.co.uk/about/	digital health	0	3	0	Male	Male	Male
Dem Dx https://www.linkedin.com/company/demdx/people/	digital health	2	1	66.66666667	Female	Male	Female
Okko Health https://okkohealth.com/en-gb/about-okko/	digital health	2	1	66.66666667	Female	Male	Female
BfB labs https://www.bfb-labs.com/aboutus	digital health	2	1	66.66666667	Female	Male	Female
Healthtech IT http://healthtech-it.com/	digital health	0	3	0	Male	Male	Male
Virtue https://www.virtue.io/about/	digital health	2	1	66.66666667	Female	Female	Male
SurgiQ https://www.linkedin.com/company/surgiq/people/	digital health	1	3	25	Male	Male	Male
Ticket Bank https://find-and-update.company-information.service.gov.uk/company/12149865/officers	digital health	0	3	0	Male	Male	Male
NuKi Health https://nuki.health/our-team	digital health	0	3	0	Male	Male	Male
Lisn https://find-and-update.company-information.service.gov.uk/company/11768045/officers	digital health	0	3	0	Male	Male	Male

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Joy (Pungo LTD) https://find-and-update.company-information.service.gov.uk/company/11914576/officers	digital health	0	3	0	Male	Male	Male
iOWNA https://iowna.com/our-team/	digital health	1	2	33.33333333	Female	Male	Male
Alva https://withalva.com/about	digital health	2	1	66.66666667	Female	Male	Female
Transforming Systems https://www.transformingsystems.com/about/	digital health	3	0	100	Female	Female	Female
TickerFit https://www.tickerfit.com/#tickerfit-team	digital health	2	1	66.66666667	Female	Male	Female
SXT Health https://sxt.health/uk/pages/about	digital health	0	3	0	Male	Male	Male
SuperCarers https://supercarers.com/about-us/	digital health	0	3	0	Male	Male	Male
Skin Analytics https://skin-analytics.com/about-us/	digital health	1	2	33.33333333	Male	Female	Male
SiteKit https://find-and-update.company-information.service.gov.uk/company/SC116007/persons-with-significant-control	digital health	1	2	33.33333333	Male	Male	Female
Living With https://www.livingwith.health/leadership/	digital health	0	3	0	Male	Male	Male
MyWay Digital Health https://mywaydigitalhealth.co.uk/aboutus/	digital health	1	2	33.33333333	Female	Male	Male

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
My Clinical Outcomes https://find-and-update.company-information.service.gov.uk/company/07557993/officers	digital health	1	2	33.33333333	Male	Female	Male
MIRA Rehab https://www.mirarehab.com/	digital health	1	2	33.33333333	Male	Male	Female
Messly https://www.messly.com/about#Team-Section	digital health	0	3	0	Male	Male	Male
Medefer https://medefer.com/about-us/	digital health	0	3	0	Male	Male	Male
Maldaba https://www.linkedin.com/company/maldaba-ltd./people/	digital health	0	3	0	Male	Male	Male
Insource https://www.insource.co.uk/about/meet-the-team/	digital health	0	3	0	Male	Male	Male
Infinity Health https://infinity.health/about	digital health	1	2	33.33333333	Male	Male	Female
Egress http://egressgroup.co.uk/Home/About	digital health	0	3	0	Male	Male	Male
eConsult https://econsult.net/about-us/executive-team	digital health	1	2	33.33333333	Male	Male	Female
Aequor	Pharma	3	0	100	Female	Female	Female
Akari Therapeutics	Pharma	0	3	0	Male	Male	Male
Amryt Pharma	Pharma	0	3	0	Male	Male	Male
Braincures	Pharma	0	3	0	Male	Male	Male
Chemocentryx	Pharma	1	2	33.33333333	Male	Female	Male
Clovis Oncology	Pharma	0	3	0	Male	Male	Male

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
CNX Therapeutics	Pharma	1	2	33.33333333	Male	Male	Female
Hikma Pharmaceuticals	Pharma	0	3	0	Male	Male	Male
Intercept Pharmaceuticals Europe	Pharma	0	3	0	Male	Male	Male
Medpace UK Limited	Pharma	0	3	0	Male	Male	Male
MicrofluidX	Pharma	0	3	0	Male	Male	Male
Mitsubishi Tanabe Pharma Europe Ltd	Pharma	0	3	0	Male	Male	Male
Novartis Pharmaceuticals UK Ltd	Pharma	0	3	0	Male	Male	Male
Orbit Discovery	Pharma	0	3	0	Male	Male	Male
Organon UK	Pharma	0	3	0	Male	Male	Male
PharmaCare Europe	Pharma	0	3	0	Male	Male	Male
Pharmamedic Consultancy Ltd	Pharma	0	3	0	Male	Male	Male
Senzer	Pharma	0	3	0	Male	Male	Male
Small Pharma	Pharma	1	2	33.33333333	Female	Male	Male
Speciality Pharma of London Ltd	Pharma	0	3	0	Male	Male	Male
Stallergenes Greer	Pharma	0	3	0	Male	Male	Male
Stort Medchem Consulting Ltd	Pharma	1	2	33.33333333	Female	Male	Male
TiKa Diagnostics Ltd	Pharma	0	3	0	Male	Male	Male
Acunova Life Sciences Ltd	Biotech	0	3	0	Male	Male	Male
ADAllen Pharma	Biotech	0	3	0	Male	Male	Male
Agenus UK	Biotech	1	2	33.33333333	Male	Female	Male
Alexion Pharma UK Ltd	Biotech	1	2	33.33333333	Male	Female	Male
Almirall Ltd	Biotech	0	3	0	Male	Male	Male
Amarin Corporation Plc	Biotech	0	3	0	Male	Male	Male
Amdipharm Mercury	Biotech	0	3	0	Male	Male	Male
Amdipharm Plc	Biotech	0	3	0	Male	Male	Male
Antibody Production Services Ltd	Biotech	1	2	33.33333333	Male	Female	Male
Astell Scientific Ltd	Biotech	1	2	33.33333333	Male	Female	Male

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Autolus Ltd	Biotech	0	3	0	Male	Male	Male
Bcare Ltd	Biotech	3	0	100	Female	Female	Female
Bioproducts Laboratory	Biotech	0	3	0	Male	Male	Male
Bio2business	Biotech	0	3	0	Male	Male	Male
Biocryst UK Limited	Biotech	2	1	66.66666667	Female	Male	Female
Biofrontline Ltd	Biotech	0	3	0	Male	Male	Male
Biomarin Limited	Biotech	1	2	33.33333333	Female	Male	Male
Biopharm Systems Ltd	Biotech	0	3	0	Male	Male	Male
Biotrial International	Biotech	1	2	33.33333333	Male	Female	Male
Brainminer LTD	Biotech	0	3	0	Male	Male	Male
Calzyme Laboratories UK Ltd	Biotech	1	2	33.33333333	Male	Female	Male
Cardiome UK Limited	Biotech	1	2	33.33333333	Male	Female	Male
Carrick Therapeutics	Biotech	1	2	33.33333333	Male	Male	Female
Celgene Limited	Biotech	1	2	33.33333333	Male	Female	Male
Chugai Pharma Europe Ltd	Biotech	0	3	0	Male	Male	Male
CIMYM Biosciences	Biotech	1	2	33.33333333	Female	Male	Male
Clustermarket	Biotech	0	3	0	Male	Male	Male
CMBarnett Pharma Services Ltd	Biotech	1	2	33.33333333	Male	Female	Male
Deep Science Ventures	Biotech	0	3	0	Male	Male	Male
Dream Pharma Ltd	Biotech	0	3	0	Male	Male	Male
Elixior	Biotech	1	2	33.33333333	Female	Male	Male
Engitix Limited	Biotech	0	3	0	Male	Male	Male
Ferring Pharmaceuticals Ltd	Biotech	0	3	0	Male	Male	Male
Fleet Laboratories Limited	Biotech	1	2	33.33333333	Male	Male	Female
Four Health Communications Limited	Biotech	2	1	66.66666667	Female	Male	Female
G.D. Cooper & Co Ltd	Biotech	0	3	0	Male	Male	Male
Galderma UK LTD	Biotech	2	1	66.66666667	Female	Male	Female

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Gilead Sciences Europe Ltd	Biotech	0	3	0	Male	Male	Male
Glialign	Biotech	0	3	0	Male	Male	Male
GlobalData	Biotech	0	3	0	Male	Male	Male
Grifols UK Ltd	Biotech	1	2	33.33333333	Male	Female	Male
Health Unlocked	Biotech	1	2	33.33333333	Female	Male	Male
Helperby Therapeutics	Biotech	0	3	0	Male	Male	Male
Hemocorm	Biotech	0	3	0	Male	Male	Male
Highbury Regulatory Science Ltd	Biotech	0	3	0	Male	Male	Male
Hisamitsu Pharmaceutical UK Limited	Biotech	0	3	0	Male	Male	Male
HRA Pharma	Biotech	1	2	33.33333333	Female	Male	Male
IGEA Medical UK	Biotech	0	3	0	Male	Male	Male
Immupharma	Biotech	1	2	33.33333333	Female	Male	Male
Interport Ltd	Biotech	1	2	33.33333333	Male	Female	Male
Intertek Group	Biotech	1	2	33.33333333	Male	Male	Female
inVentiv Health Commercial Europe LTD	Biotech	0	3	0	Male	Male	Male
Istesso	Biotech	1	2	33.33333333	Male	Female	Male
Kamada Biopharma Limited	Biotech	0	3	0	Male	Male	Male
Kapa Biosystems	Biotech	0	3	0	Male	Male	Male
Keryx Biopharma Limited	Biotech	1	2	33.33333333	Male	Male	Female
Lambda Therapeutic Limited	Biotech	1	2	33.33333333	Female	Male	Male
LondonPharma	Biotech	0	3	0	Male	Male	Male
MAG Optics Ltd.	Biotech	1	2	33.33333333	Male	Female	Male
Martindale Pharmaceuticals Ltd	Biotech	0	3	0	Male	Male	Male
Marvel Life Sciences Limited	Biotech	2	1	66.66666667	Female	Female	Male
MDB Pharma Consultants Ltd	Biotech	0	3	0	Male	Male	Male
Medimpex UK Ltd	Biotech	1	2	33.33333333	Male	Male	Female
Merck Serono	Biotech	1	2	33.33333333	Male	Male	Female

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Merz Pharma UK Limited	Biotech	1	2	33.33333333	Male	Male	Female
Millipore UK LtD	Biotech	1	2	33.33333333	Male	Male	Female
Mucokinetica Ltd	Biotech	1	2	33.33333333	Male	Male	Female
NanoRegMed	Biotech	2	1	66.66666667	Female	Male	Female
Nicoventures Limited	Biotech	1	2	33.33333333	Male	Female	Male
Norgine Pharmaceuticals Ltd	Biotech	1	2	33.33333333	Male	Male	Female
Novasecta Ltd	Biotech	0	3	0	Male	Male	Male
Orchard Therapeutics	Biotech	1	2	33.33333333	Male	Female	Male
Organon Laboratories Ltd	Biotech	1	2	33.33333333	Male	Female	Male
OTC Direct Ltd	Biotech	1	2	33.33333333	Female	Male	Male
Oxbridge Pharma LTD	Biotech	0	3	0	Male	Male	Male
Oxford Drugs Design Limited	Biotech	0	3	0	Male	Male	Male
P.A.S.M Limited	Biotech	1	2	33.33333333	Male	Female	Male
Page, White and Farrer Limited	Biotech	1	2	33.33333333	Male	Male	Female
Payal London Consolidated Ltd	Biotech	1	2	33.33333333	Male	Female	Male
PCR Biosystems	Biotech	1	2	33.33333333	Male	Male	Female
Peprotech Ec Ltd	Biotech	1	2	33.33333333	Female	Male	Male
Pharma Modus Ltd	Biotech	2	1	66.66666667	Female	Male	Female
Pharmasure	Biotech	1	2	33.33333333	Female	Male	Male
Pharmawave Ltd	Biotech	0	3	0	Male	Male	Male
Pharmidex	Biotech	0	3	0	Male	Male	Male
Plasticell	Biotech	0	3	0	Male	Male	Male
PPMLD Ltd	Biotech	2	1	66.66666667	Female	Female	Male
Prep BioPharm	Biotech	0	3	0	Male	Male	Male
Profiscio Limited	Biotech	3	0	100	Female	Female	Female
Progenitor Labs Ltd	Biotech	0	3	0	Male	Male	Male
Proteome Sciences Plc	Biotech	0	3	0	Male	Male	Male

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Quethera	Biotech	1	2	33.33333333	Male	Female	Male
Ranbaxy UK Ltd	Biotech	1	2	33.33333333	Female	Male	Male
RD Connect Ltd	Biotech	3	0	100	Female	Female	Female
Regen Therapeutics Ltd	Biotech	0	3	0	Male	Male	Male
Regeneron Pharmaceuticals	Biotech	0	3	0	Male	Male	Male
Rexgenero (IXAKA LIMITED)	Biotech	0	3	0	Male	Male	Male
Richmond Pharmacology Ltd	Biotech	1	2	33.33333333	Male	Male	Female
Science-Practice LTD	Biotech	2	1	66.66666667	Male	Female	Female
Sigmacon UK Ltd	Biotech	0	3	0	Male	Male	Male
Sinclair IS Pharma Plc	Biotech	0	3	0	Male	Male	Male
Smart Matrix Limited	Biotech	0	3	0	Male	Male	Male
Spark Therapeutics	Biotech	0	3	0	Male	Male	Male
Sunovion Pharmaceuticals Europe Ltd (C	Biotech	1	2	33.33333333	Female	Male	Male
Tiziana Life Sciences	Biotech	0	3	0	Male	Male	Male
Touchlight Genetics	Biotech	0	3	0	Male	Male	Male
UK Regulatory Consultancy Limited	Biotech	0	3	0	Male	Male	Male
Vectura Group Services Limited	Biotech	0	3	0	Male	Male	Male
Vermilion Life Sciences	Biotech	0	3	0	Male	Male	Male
Vertex Pharmaceuticals Europe Ltd	Biotech	1	2	33.33333333	Female	Male	Male
Vifor Pharma UK	Biotech	0	3	0	Male	Male	Male
Viiv Healthcare UK Limited	Biotech	3	0	100	Female	Female	Female
Wolfson Research LTD	Biotech	1	2	33.33333333	Male	Male	Male
World Courier UK Ltd	Biotech	1	2	33.33333333	Male	Male	Female
Xenetic Bioscienes UK Limited	Biotech	0	3	0	Male	Male	Male
Zentiva Limited	Biotech	0	3	0	Male	Male	Male
NEOOPTIMA LIMITED (15 Healthcare)	Medtech	0	3	0	Male	Male	Male
A&J Dental Laboratory LTD	Medtech	1	2	33.33333333	Male	Male	Female

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Agfa Healthcare UK Limited	Medtech	0	3	0	Male	Male	Male
Apple Europe Limited	Medtech	0	3	0	Male	Male	Male
Barema	Medtech	1	2	33.33333333	Female	Male	Male
Barrington Healthcare International Limite	Medtech	1	2	33.33333333	Male	Male	Female
Bausch & Lomb UK Ltd	Medtech	0	3	0	Male	Male	Male
Big Health Ltd	Medtech	0	3	0	Male	Male	Male
Bio-rad Laboratories (Clinical Diagnostics	Medtech	0	3	0	Male	Male	Male
Body Clock Health Care Limited	Medtech	1	2	33.33333333	Male	Male	Female
Boston Scientific Ltd	Medtech	0	3	0	Male	Male	Male
Buddi	Medtech	1	2	33.33333333	Male	Male	Female
Burkard Manufacturing Co Ltd	Medtech	0	3	0	Male	Male	Male
Cambridge Biopolymers	Medtech	0	3	0	Male	Male	Male
Caterham Surgical Supplies Ltd	Medtech	1	2	33.33333333	Male	Female	Male
Centronic Ltd	Medtech	0	3	0	Male	Male	Male
Cerner Ltd	Medtech	0	3	0	Male	Male	Male
Chiaro Technology Limited	Medtech	1	2	33.33333333	Female	Male	Male
Clinical Trials Lab Services Ltd	Medtech	0	3	0	Male	Male	Male
Clinisupplies Ltd	Medtech	0	3	0	Male	Male	Male
Colonix Ltd	Medtech	0	3	0	Male	Male	Male
Contour 886	Medtech	1	2	33.33333333	Male	Male	Female
SAVA TECHNOLOGIES LTD. (CortiCare)	Medtech	0	3	0	Male	Male	Male
Day Lewis PLC	Medtech	0	3	0	Male	Male	Male
Docobo Ltd	Medtech	0	3	0	Male	Male	Male
Doddmed Ltd	Medtech	0	3	0	Male	Male	Male
D.P. Medical Systems Ltd	Medtech	0	3	0	Male	Male	Male
TELSTRA HEALTH UK LIMITED (Dr Fost	Medtech	0	3	0	Male	Male	Male
EarTex	Medtech	0	3	0	Male	Male	Male

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Epicardio	Medtech	0	3	0	Male	Male	Male
Euroimmun UK Ltd	Medtech	0	3	0	Male	Male	Male
Excellentcare Medical Ltd	Medtech	0	3	0	Male	Male	Male
Fenton Pharmaceuticals Ltd	Medtech	2	1	66.66666667	Male	Female	Female
Fine Group PLC	Medtech	0	3	0	Male	Male	Male
Fresh Check Ltd	Medtech	0	3	0	Male	Male	Male
REEVES TECHNOLOGY AND INNOVATI	Medtech	0	3	0	Male	Male	Male
Gama Healthcare Ltd	Medtech	0	3	0	Male	Male	Male
EXACT SCIENCES UK, LTD. (Genomic H	Medtech	0	3	0	Male	Male	Male
Genova Diagnostics Europe	Medtech	0	3	0	Male	Male	Male
Gold Standard Phantoms	Medtech	0	3	0	Male	Male	Male
Gowerlabs	Medtech	0	3	0	Male	Male	Male
Grena Ltd (London)	Medtech	0	3	0	Male	Male	Male
Halley Medical Supplies	Medtech	0	3	0	Male	Male	Male
Hammersmith Medicines Research Ltd	Medtech	0	3	0	Male	Male	Male
Hanover limited	Medtech	2	1	66.66666667	Female	Male	Female
Health Partners Europe Ltd	Medtech	1	2	33.33333333	Female	Male	Male
Helier Scientific Ltd	Medtech	0	3	0	Male	Male	Male
Hygiena International	Medtech	0	3	0	Male	Male	Male
Image Analysis Ltd	Medtech	1	2	33.33333333	Female	Male	Male
GET ANIMATED MEDICAL LIMITED (Ima	Medtech	0	3	0	Male	Male	Male
In Practice Systems Ltd	Medtech	0	3	0	Male	Male	Male
Instinctif Partners	Medtech	1	2	33.33333333	Male	Male	Female
Keyron ltd	Medtech	0	3	0	Male	Male	Male
MEDSUPPLY INTERNATIONAL UK LTD (	Medtech	0	3	0	Male	Male	Male
Lab Merchant	Medtech	0	3	0	Male	Male	Male
Leniomed	Medtech	0	3	0	Male	Male	Male

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Livesmart U.K Ltd	Medtech	0	3	0	Male	Male	Male
London Associates Design	Medtech	0	3	0	Male	Male	Male
NATHAN GLUCK HEARING CARE LIMIT	Medtech	1	2	33.33333333	Female	Male	Male
Lynbond 2000 Ltd	Medtech	0	3	0	Male	Male	Male
Medical Wireless Sensing	Medtech	0	3	0	Male	Male	Male
Medicon Strategic Development Ltd	Medtech	0	3	0	Male	Male	Male
MediSieve	Medtech	1	2	33.33333333	Male	Male	Female
Meditec International England Ltd	Medtech	0	3	0	Male	Male	Male
Medivance Instruments Limited	Medtech	0	3	0	Male	Male	Male
Mills & McKinney Practice Ltd	Medtech	1	2	33.33333333	Male	Female	Male
Nalia Systems	Medtech	0	3	0	Male	Male	Male
Neo-Innovations UK Ltd	Medtech	3	0	100	Female	Female	Female
Neurocare Europe Limited	Medtech	1	2	33.33333333	Male	Male	Female
Nuvasive UK Ltd	Medtech	0	3	0	Male	Male	Male
Optelec Limited	Medtech	0	3	0	Male	Male	Male
Orion Health Limited	Medtech	1	2	33.33333333	Male	Male	Female
P.S.P Dental Limited	Medtech	0	3	0	Male	Male	Male
Pacific Biosciences	Medtech	0	3	0	Male	Male	Male
Pervasive Networks	Medtech	0	3	0	Male	Male	Male
Purple Surgical	Medtech	0	3	0	Male	Male	Male
Quotec Ltd	Medtech	0	3	0	Male	Male	Male
RDT Ltd	Medtech	0	3	0	Male	Male	Male
Reproductive Immunology Centre	Medtech	0	3	0	Male	Male	Male
Richard Wolf UK Ltd	Medtech	0	3	0	Male	Male	Male
Right Choice Mobility	Medtech	0	3	0	Male	Male	Male
Robin Medical Ltd	Medtech	0	3	0	Male	Male	Male
Sciad Ltd	Medtech	3	0	100	Female	Female	Female

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Silvercloud Health UK Limited	Medtech	0	3	0	Male	Male	Male
SIME Diagnostics	Medtech	0	3	0	Male	Male	Male
Smart Cells International Ltd	Medtech	3	0	100	Female	Female	Female
Smiths Medical (Smiths Group Plc)	Medtech	0	3	0	Male	Male	Male
Spacelabs Healthcare Ltd	Medtech	0	3	0	Male	Male	Male
Speciality Scanners Plc	Medtech	0	3	0	Male	Male	Male
Spinevision Ltd	Medtech	0	3	0	Male	Male	Male
Tactiq Ltd	Medtech	0	3	0	Male	Male	Male
Therapy Equipment Ltd	Medtech	0	3	0	Male	Male	Male
ThinkSono	Medtech	0	3	0	Male	Male	Male
UK Healthgateway	Medtech	0	3	0	Male	Male	Male
Viking Mobility Aids Ltd	Medtech	0	3	0	Male	Male	Male
Vision Rt	Medtech	0	3	0	Male	Male	Male
Vitech Scientific Limited	Medtech	0	3	0	Male	Male	Male
Wardray Premise Ltd	Medtech	2	1	66.66666667	Male	Female	Female
Westmeria Healthcare Limited	Medtech	0	3	0	Male	Male	Male
XDG Services Medical	Medtech	0	3	0	Male	Male	Male
iamYiam	AI	1	2		Male	Female	Male
4D Data Centres Limited	Healthcare	0	3	0	Male	Male	Male
11 Health & Technologies Limited	Healthcare	0	3	0	Male	Male	Male
AccuRx	Healthcare	0	3	0	Male	Male	Male
ADA digital health	Healthcare	1	2	33.33333333	Female	Male	Male
Ampersand	Healthcare	1	2	33.33333333	Male	Male	Female
Baby2Body	Healthcare	3	0	100	Female	Femal	Female
Babylon Health	Healthcare	0	3	0	Male	Male	Male
Togetherall	Healthcare	2	1	66.66666667	Female	Male	Female
BioBeats	Healthcare	1	2	33.33333333	Male	Male	Female

Company	Sector	Women	Men	% Women in top 3 Leadership positions	Founder	CEO	CFO
Blue Maestro Ltd	Healthcare	1	2	33.33333333	Female	Male	Male
Bupa	Healthcare	0	3	0	Male	Male	Male
CareAcross	Healthcare	0	3	0	Male	Male	Male
Cera Care	Healthcare	0	3	0	Male	Male	Male
Circular Wave	Healthcare	0	3	0	Male	Male	Male
Comarch Ltd	Healthcare	0	3	0	Male	Male	Male
Cuprid Limited	Healthcare	0	3	0	Male	Male	Male
Dem Dx	Healthcare	2	1	66.66666667	Female	Female	Male
DNAnudge	Healthcare	1	1	50		Male	Female
Doctor Care Anywhere	Healthcare	0	3	0	Male	Male	Male
Dr Toolbox	Healthcare	0	3	0	Male	Male	Male
Druginfo Ltd	Healthcare	0	3	0	Male	Male	Male
DualGood Health	Healthcare	1	2	33.33333333	Male	Female	Male
Durbin plc	Healthcare	0	3	0	Male	Male	Male
eConsult Health Ltd	Healthcare	0	3	0	Male	Male	Male
emteq	Healthcare	1	2	33.33333333	Male	Male	Female
Xperiome	Healthcare	2	1	66.66666667	Female	Male	Female
FollowApp Care	Healthcare (AI)	0	3	0	Male	Male	Male
Helicon Health	Healthcare	0	3	0	Male	Male	Male
Holoxica Limited	Healthcare	1	2	33.33333333	Female	Male	Male
i5 Health	Healthcare	0	3	0	Male	Male	Male
Illuminatis Limited	Healthcare	1	1	50		Female	Female
imin	Healthcare	0	3	0	Male	Male	Male
Immersive Rehab	Healthcare	1	0	100	Female		
ImproveWell	Heathcare	1	2	33.33333333	Male	Female	Male
InfinityHealth	Healthcare	1	2	33.33333333	Female	Male	Male

APPENDIX 3

Count of gender representation in leadership of London-based Life Sciences companies and universities researching the Life Sciences.

	Russell Group	Non-Russell Group	*All universities*
Women	2	23	25
Men	11	49	60
% Women	15.38461538	31.94444444	29.41176471
% Women (3sf)	15.4	31.9	29.4

	Digital Health	Pharma	Biotech	Medtech	Healthcare	*All sectors*
Women	53	7	75	31	20	188
Men	182	62	273	269	75	868
% Women	22.55319149	10.14492754	21.55172414	10.33333333	21.05263158	17.8030303
% Women (3sf)	22.6	10.1	21.6	10.3	21.1	17.8