

Delivering Increased Wealth and Improving Health; a Unified Place-Based Approach

An impact report from the Northern Health Science Alliance (NHSA) and MedCity, highlighting our joint activity and shared successes in our Research England Development (RED) project (2020-23).

Please read in conjunction with our NHSA annual report(s), MedCity Impact Report 2023, [NHSA news online](#) and [MedCity news online](#) for all RED-funded activity and success stories, from our respective regions.

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FOREWORD

In 2020 we embarked on an exceptional three-year project, supported by the Research England Development (RED) fund. It was the first time that cluster organisations hosted by leading universities in the North and South of England collaborated to support UK growth and productivity in life sciences.

Our workstreams built upon 12 years of collective experience between the NHSA and MedCity in delivering pan-regional collaboration, health research and economic development. Synergy and collaboration were at the heart of our partnership.

We aligned research themes including diagnostics and advanced therapies and areas such as investment to support delivery of the Industrial Strategy and Life Sciences Vision. We successfully brought together UK 'place-based' cluster organisations across Northern Ireland, Scotland, the North of England, Midlands, South West and London to harness the health and life sciences expertise across the nation and position UK Plc on an international stage.



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INTRODUCTION

This three-year project set out to catalyse a significant step-change in the work of two regional life science cluster organisations hosted by Newcastle University and King's College London respectively - namely the [Northern Health Science Alliance](#) (NHSA) and [MedCity](#).

With Research England Development (RED) funding, our organisations were tasked to scale up activities, build upon existing programmes of work, and bring new activities and initiatives forward that support collaboration between Higher Education Institutions (HEI), industry and the NHS. With a strong emphasis on developing a nationally coordinated approach, we are delighted to present this impact report on our shared activity, learning and success factors, as we delivered international outreach in life sciences, and a coordinated response to, initially the [Industrial Strategy](#), and latterly the [Life Sciences Vision](#) priorities, to drive economic growth within the life sciences ecosystem.

To reflect the richness of our relationship, the use of 'we', 'us' and 'our' represents 'the NHSA and MedCity' in this impact report.

Workstream 1: Developing our International Programme to Build the UK's Profile in Key Emerging Markets

In this RED-funded project, we worked with our existing and emerging overseas markets, to create a pipeline of new partnerships and research collaborations with industry. Our international activities over the past three years have focussed on outbound and inbound missions, building the profile of our members in these markets, developing beneficial relationships and identifying potential collaboration partners overseas.

Post-Brexit, the importance of international collaboration, trade support, and identification of inward investment opportunity is pivotal to the UK as we navigate a new relationship with Europe and new trading relationships with the rest of the world.

The Covid pandemic, which forced a global move to virtual conferences and meetings during 2020-21 lockdowns, brought us new opportunities for longer-term engagement with overseas partners — for example, co-hosting a series of knowledge exchange webinars, and facilitating partnering activity across online matchmaking platforms.

Our international activity from this RED-funded project reached a targeted global audience of more than 5500, connecting UK centres of expertise with potential industry and academic collaborators in 12 countries identified as significant investors in UK life sciences.

Here we highlight our top 3 co-delivered events, where we showcased the health and life sciences expertise across the nation to benefit UK Plc on the international stage:

Japan

■ At the invitation of the Japan Bioindustry Association, MedCity led a UK delegation to BioJapan 2022 – Asia's largest biopharma expo – consisting of the NHSA, Cancer Research UK, UCL, NIHR, Kings College, Barts Health, Richmond Pharma and the Precision Health Tech Accelerator from Birmingham University. Collectively the delegates met with 119 international investors, industry and institutional attendees, building new partnerships and consolidating existing collaborations.

More details on the significance of the event can be found here: [Column for The Pharma Letter](#) OpEd, [NHSA blog](#), and in [press coverage](#).

Other Japan-focused events activity included our joint Life Science Symposium event in Tokyo, ahead of BioJapan, and three online partnering and knowledge-sharing events with Link-J and the JBA between September 2021 and May 2022.

China

■ In April 2023, we joined forces with TusPark UK to organise and deliver the [UK-China Life Science and Healthcare Development Forum](#), a knowledge exchange event reaching over 1000 attendees to attract more Chinese healthcare and biotech companies to set up, grow, and succeed in the UK.

■ We supported three additional events in the region between November 2021 and April 2022, including the [UK-China Roundtable on R&D for Future Pandemic Prevention: Testing, Vaccines and Therapeutics](#) (February 2022) hosted by the British Embassy in Beijing. There were over 160 people in attendance, with key messages emerging from the academic and scientific research communities for policy makers in both the UK and China on R&D investment for future pandemic preparedness. More details can be found in the [event report](#).

Germany

■ Together with partners from Wales and Scotland, we facilitated UK speaker nominations and selection, a UK event moderator, plus attendees from across both clusters, for a [UK-Germany 'Meet and Match' event in Cell and Gene Therapy](#) (virtual, 14-15 December 2022). The event was judged a success, with 170 registrations (64 from the UK and 86 from Germany). 119 people listened to the live stream over the two days and 101 event participants registered for matchmaking, with 122/272 requested meetings accepted.

The following map illustrates all our international outreach activities over the past 3 years, representing 25 events across 12 countries.

At BioJapan 2022, Professor David Lomas, Vice Provost (Health), University College London, and MedCity board member delivered an opening keynote speech for the UK and said:

"I am delighted to be able to give the keynote address at BioJapan 2022, as this is a fabulous opportunity to celebrate and build on historical links with Japan. The greatest challenges in health and life sciences require the complementary expertise of many partners, including academia and industry. By fostering further research collaborations between Japanese institutions and UK academics, we can continue to maximise the social impact of our work."



International outreach activities

Canada

- Centre for Ageing and Brain Health Virtual Summit Delegation 2021
- UK-Canada Agetech Innovation Exchange Programme

Northern Ireland

- Cluster Meetings

Wales

- Cluster Meetings

Scotland

- Cluster Meetings
- Edinburgh European Cell and Gene therapy Congress

Japan

- Digital Partnering for Pharmaceutical R&D
- UK Pharma and Medtech Regulation Webinar
- BioJapan 2022 Delegation
- Japan Life Science Digital Seminar 2022

Estonia

- Delegation in London and Leeds

Belgium

- Hosted Delegation in London

Barcelona Spain

- Healthcare Entrepreneur Exchange Programme

Taiwan

- Digital Partnering for Collaborative R&D

India

- UK Healthtech Strengths roundtable

Israel

- Biomed Digital 2021, Digital Delegation
- Digital Dragons Den pitch series
- Biomed 2022 Delegation
- Cyber Security for healthcare roundtable 2022
- UK-Israel International Health Tech Pilot and R&D programme 2022-2023

China

- Investing in the UK's Medtech Powerhouse digital event
- UK-China Life Science and Healthcare Development Forum
- UK-China Round table and report Pandemic Preparedness

Workstream 2: Supporting the Implementation of the Industrial Strategy (and Life Sciences Vision)

Over the past three years, we have supercharged cross-cluster innovation and investment activity. Our diverse programme of joint work supports implementation of the UK Industrial Strategy and has enabled industry-academic collaborations in diagnostics and advanced therapies.

Diagnostics

Both MedCity and the NHSA have been catalysts for building strong diagnostic networks and consortia to fast-track diagnostic development and enable better industry partnerships. In July 2022, we partnered with the UKRI Science and Technology Facilities Council (STFC) [North West HealthTec](#) Cluster to host a Diagnostics Summit, with a focus on growing innovation and investment for diagnostics.

Over 20 national stakeholders participated in the event, sharing best practice for working with industry, identifying key challenges and exploring collaborative initiatives for diagnostics. MedCity presented their [Diagnostics Growth Hub](#), [Collaborate to Innovate programme](#) and Biomarker Matchmaking events, and future steps involve our working with stakeholders to pursue the identified collaborative initiatives. Our policy outreach has included meeting with the secretariat of the recently launched [All-Party Parliamentary Group](#) (APPG) for Diagnostics, and sharing the recommendations from our Summit event, to help inform their roundtable agendas and stakeholder invitations.

Lastly, we will seek opportunities to work with the Department of Health and Social Care to implement the [Medical Technology Strategy](#) (February 2023). This has a clear focus on Diagnostics within it, where we expect to be able to pursue the identified collaborative initiatives from our Summit event.



Advanced Therapies

The UK is a world leader in the development of Advanced Therapy Medicinal Products (ATMPs), evaluation, and clinical delivery, with the field expected to grow significantly in the future.

In the second year of our RED-funded project, Research England awarded £1.3m, through its Connecting Capabilities Fund, to London Advanced Therapies, hosted by King's College London, to expand its activity into a UK-wide collaborative network – UK Advanced Therapies (UKAT) – connecting existing regional clusters of excellence.

We supported London Advanced Therapies to link partners across the North of England, London, Scotland, and Northern Ireland and develop a series of UKAT regional roadshow events.

As part of the UK Advanced Therapies Network roadshow series to promote regional capabilities, we delivered a satellite event at the European Society of Gene and Cell Therapy (ESGCT) annual congress in Edinburgh. The event focussed on showcasing successes in commercialisation of academic research in cell and gene therapies to an assembled panel of investors who specialise in the Advanced Therapies space. It demonstrated that life science cluster organisations can play a vital role in helping investors navigate the advanced therapies ecosystem in regions UK-wide, spotlighting exceptional translational research.

Read more here about the satellite event: [Evolving the UK Advanced Therapies research-investor community](#)

“MedCity has been successfully fostering collaboration for years. When we were seeking to expand London Advanced Therapies to create a Network of Networks, MedCity supported us by connecting LAT to other regional Life Sciences Clusters as NHSA (Northern England), HIRANI (Northern Ireland) and SULSA (Scotland). These Clusters went on to become members South West Advanced Therapies, North England Advanced Therapies, Scotland Advanced Therapies and Northern Ireland Advanced Therapies. UK Advanced Therapies (UKAT) was born!”

Francesca Gliubich, Director UKAT and Interim Director of Operations – Faculty of Medicine and Dentistry, Queen Mary University of London



11th July 2022 – Circle Square, Manchester, UK



Investment

A highlight of the project has been connecting investors and innovators across regional borders through two investor-focused events – the Life Sciences Innovation and [Investor Showcase in Leeds in March 2022](#) and the other at The Francis Crick Institute, in London, the [UK Life Sciences Investment Summit 2023](#).

These events brought together innovation agencies and investors from across the UK to facilitate knowledge exchange and connectivity, highlighting the strengths of each region while addressing common challenges and opportunities. Our London event expanded on the success of the previous year by connecting with two other regional cluster organisations, Health Innovation Research Alliance Northern Ireland ([HIRANI](#)) and [Midlands Engine - Health](#).

There is more to be done on the movement of financial capital within the UK to ensure that great ideas can succeed wherever they come from. We look forward to continuing to work with the other UK clusters to position the UK as the global innovation partner of choice for Life Sciences.

**WATCH
HIGHLIGHTS
OF THE 2023
EVENT
[HERE](#)**



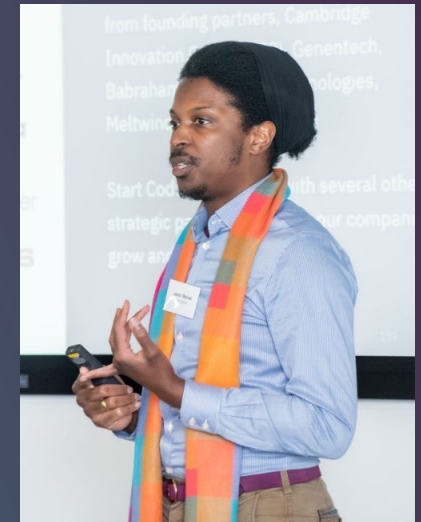
“During times of rapid dynamic change, it is key to the health of the ecosystem that thoughtful insights on trends in the environment and particularly the financing environment, are shared widely. The UK Life Sciences Investment Summit achieved this with the diversity of attendees and the geographic reach back through their organisations being particularly gratifying. Whilst the financing climate is clearly tough, our lively panel discourse, distilled out practical and positive suggestions that will undoubtedly contribute towards sector success and impact.”

Dr Andy Richards CBE, a director of Cancer Research Horizons and the Scale-up Institute and chair of several biotech companies



“The MedCity and NHS event really opened my eyes to the talent, opportunity, and ambition in Leeds as well the surrounding Northern regions, especially relevant for Start Codon as our portfolio includes companies based across the UK. The conference provided an excellent opportunity to network with other support organisations, all of whom are potential Start Codon partners. The NHS innovation leaders at the meeting had a clear understanding of the unmet needs that our portfolio companies could and should be addressing with their technologies, and the partners I met can help drive both NHS adoption as well as broader commercialisation. Following the conference, I've followed up with incubators, AHSNs, investors, and accelerators to forge new partnerships. In addition, I have met with several founders and early-stage companies who have now applied to the Start Codon programme.”

**Dr Jason Mellad,
Co-founder and CEO, Start Codon**



Workstream 3: Supporting the growth of UK Life Science clusters through shared learning

In the UK, successful life science clusters bring together industry, investors, academia, the NHS and organisations such as the National Institute for Health Research (NIHR), and the Academic Health Science Networks (AHSNs). Anchored by institutions including research-intensive NHS Trusts, universities or manufacturing hubs, UK life science clusters include Manchester, Yorkshire, Newcastle, London, Cambridge, and Oxford. Clusters drive growth and productivity by facilitating:

- Networking and collaboration
- Research and Innovation
- Skills development and training
- Internationalisation of cluster assets
- The ability to do 'high risk' work in a low-risk environment
- A neutral platform for convening siloed resources

MedCity and the Nhsa are two of the largest and most active UK Life Science cluster support organisations. Over the past three years and supported by the Academy of Medical Sciences (AMS), we have developed and connected capability, for the benefit of UK Plc, by bringing together a federation of the emerging life science cluster-support organisations.



The major regional clusters in this federation are shown on the UK map, right.

Our group met regularly over the first 18 to 24 months of this RED-funded project, working together to share best practice and influence collectively around national initiatives. The group took a place-based approach to strengthening our health and life sciences ecosystems to deliver better health outcomes, drive economic growth and productivity, and ensure the innovation strengths of one region provide benefits across the entire UK.



In our third year, we moved from this model of quarterly meetings to develop an activity-based model of shared learning in practice.

In addition to the co-delivered Investment, Diagnostics, and Advanced Therapies events highlighted earlier in this report, we published '[Life sciences: Super Clusters for Global Britain and Northern Ireland](#)', which was an invited submission to the [Levelling Up white paper](#), co-authored with HIRANI.

Our report concluded that the UK does not lack research excellence, but to remain a global innovation superpower it is crucial we build on recognised best practice in connecting and diffusing knowledge and invest in places capable of unlocking growth. Innovation cluster support organisations provide the most obvious mechanism for achieving this.

"Recognising and maximising the value of life sciences clusters is a key step towards maintaining the UK as a global powerhouse of the life sciences. 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, former President of the
Academy of Medical Sciences



UK Life Sciences Investor and Innovation Showcase, Leeds, 2022.



UK Life Sciences Investment Summit, London, 2023. CEOs in panel discussion on the role of life science clusters in facilitating UK trade and investment. Joann Rhodes, HIRANI CEO (Northern Ireland), speaking.

Future ambition

As this final impact report demonstrates, our RED-funded project has enabled regional life science cluster support organisations to deliver increased wealth and improve health by driving industry collaborations with the Higher Education Institution (HEI) sector, NHS partners operating in the R&D and Innovation landscape, and the third sector, nationally.

In terms of the RED fund priorities for **(i) equality, diversity and inclusion (EDI) in research and knowledge exchange** and **(ii) collaborations in research**, we welcome the Government's commitment in the '[Levelling Up the United Kingdom](#)' white paper to spread opportunity more equally across the UK (February 2022). Both MedCity and the NHS support levelling up for the benefit of the UK as a global science superpower and to improve health outcomes for all underserved communities. Clusters are mechanisms to achieve levelling up using well-established networks and relationships that can be connected to bring better research and innovation capabilities to all parts of the UK, as demonstrated in several of our published reports:

- [A Northern Life Sciences Supercluster \(Sept 2021\)](#)
- [Advancing Clinical Trials Report \(March 2023\)](#)
- [Community & Cluster Dynamics \(April 2022\)](#)
- [Life Sciences Skills & Training Directory \(May 2023\)](#)
- [Life Sciences Innovation Districts Map \(June 2023\)](#)

In terms of the RED fund priority **(iii) delivering Industrial Strategy through knowledge exchange**, we see this in the context of the government thinking on cluster formation expressed in the Life Sciences Vision. Moving the dial in a positive direction on the UK economy should involve investing in, and joining up, clusters.

We have the expertise and facilities across our universities, NHS trusts, and businesses, to enable innovation through the strengths and assets in our respective regions and, through knowledge exchange, to help address

the key healthcare missions outlined in the [Life Sciences Vision](#), such as accelerating technologies into the NHS to address the burgeoning Mental Health crisis for example through the [Northern Innovation Accelerator for Mental Health \(NIAMH\)](#), led by the NHS, and accelerating the innovation journey for diagnostics companies to move them closer to market, e.g. through the [MedCity Diagnostics Growth Hub](#), [Collaborate to Innovate programme](#) and Biomarker Matchmaking events.

Research England and UKRI have already built the foundations for success in joining up our clusters, meaning there is a genuine opportunity to build upon this work and scale up the gains. It is a complex ecosystem, but our two longest-established UK cluster organisations have insights and understanding between us that mean we have the start of a solution to the capital base being concentrated in the South and the need for capital in the North. Following the pandemic, people and companies are no longer tied by geography and can move to where there is growth opportunity. Very often companies may start off in London, perhaps as spinouts from the concentration of universities there, but may move because they later need to access capabilities elsewhere. That is why connection between places is so important. We have excellent opportunities for growth and job creation in a wide variety of life sciences fields, but investment in clusters must be sustained to build back better, level up and make the UK a global scientific superpower.

We note the recently announced [£650 million Life Sciences Growth package](#) to amplify the impact of the Life Sciences Vision and Industrial Strategy, and to actively grow the UK economy. We look forward to exploring what opportunities this will bring to regional life science cluster organisations like ours. Our RED-funded project has demonstrated that it is possible to successfully deliver increased wealth and improve health through a unified place-based approach. Our shared future ambition is to continue to grow and collaborate at scale, for the benefit of UK Plc.

"The Northern Health Science Alliance's successful representation of the North's top institutions, facilities and researchers has drawn in industry and expertise to create a Northern Powerhouse in health science."

George Freeman MP, Minister for Science, Research and Innovation

"I'm proud that London is home to three of the world's top 20 universities for life sciences, 500 medtech companies and a growing and vibrant health research sector. Bringing together the unrivalled expertise of MedCity and London & Partners will enable us to more effectively drive investment and innovation in our city as we promote these strengths across the globe."

Sadiq Khan, Mayor of London