



Life sciences transforming North-East London

Barts Life Sciences, a partnership between Barts Health NHS Trust and Queen Mary University of London (QMUL), is working with a range of private and public sector partners to create one of the largest, most concentrated, Life Science areas in the country. In this article, Dr Grant Bourhill, MD of Barts Life Sciences, describes the transformational initiative.



Above: Dr Grant Bourhill has a wealth of experience in the innovation, real estate and research sectors. He is currently MD at Barts Life Sciences, focussed on driving innovation into healthcare supported by substantial new real estate in East London dedicated for Life Sciences.

He has worked in both private and public sectors and has been involved in innovation across multiple areas, including clean energy, consumer electronics, space and defence.

He currently sits on the Board of the UK Science Park Association and holds an MBA from Oxford University.

We are entering the golden age for Life Sciences, with rapid progress being made across several technological areas, including AI, wearables, therapeutics, robotics and automation, genomics, healthtech devices and remote monitoring. Further, private sector investment into Life Science Clusters has also grown substantially, especially since the Pandemic.

One of the greatest strengths in North-East London is our richly diverse community. We have the world's gene-pool on our doorstep with a population of over 2.5 million people representing 97 nations. The region is also the fastest growing in the country – forecast to grow by about 15% in the next 15 years, equivalent to a city the size of Southampton relocating to the area. The scale and diversity of our population is a huge asset, meaning innovations trialled and deployed in East London have the potential for global impact.

The founding partners of Barts Life Sciences (BLS), namely Barts Health and QMUL, have been major anchor institutions providing healthcare for the people of North-East London for centuries.

Barts Health NHS Trust is the largest in London and the second largest Trust in the UK, is home to three national biobanks, hosts separate research repositories containing over 500,000 human tissue samples, and has over 34,000 patients actively involved in research programmes. That means that Barts Health is consistently one of the top Trusts for commercial clinical trials in the country. From October this year, we will also provide access for industry and academia to our 2.5m anonymised electronic patient records.

QMUL is one of the most cited institutions for medical research globally. It is ranked 14th in the world for research quality and is renowned for strengths in cancer, cardiovascular, genomics, inflammation, precision healthcare, population health, and big data science. It was home to the 100,000 Genomes Project and

recently, one of our Academic Clinicians was featured in the Times list of the top 100 Global Healthcare Practitioners for 2024.

Working with a growing range of industrial and academic collaborators, the focus of Barts Life Sciences is rapid innovation translation into everyday healthcare. This is a win for the local community who get access to leading edge treatments and therapies first but is also a win for industrial and academic partners. For example, we are working with Sanofi to analyse electronic health records to identify people at risk of Gaucher disease, a rare genetic condition. This exciting partnership has the potential to significantly reduce diagnosis times and help patients get the care they need much sooner.

As mentioned, the region already has a large and diverse population alongside globally recognised public sector anchor institutions. The next step is to combine these benefits with world-class commercial facilities, which is what the two

Left: The cluster in Whitechapel will encompass around 4 million square feet upon full development

Below: Visual of the vertical campus at Canary Wharf which is set to be the largest life sciences development in Europe



separate but nearby Life Sciences Clusters - in Whitechapel and Canary Wharf - will deliver.

Our ambition is to create one of the largest, most concentrated Life Science focussed areas in the country. Over 2.2 million square feet of facilities already exist, with a further 2 million square feet under construction or awaiting planning consent. Additionally, another 2.6 million square feet of Life Science buildings have outline planning consent. Creating thousands of high-quality jobs, the Whitechapel Cluster and Canary Wharf Cluster will be transformational for the region and underpin the Government strategy of the UK being a Life Sciences powerhouse. We are truly enabling an East London Life Sciences "Super Cluster".

Whitechapel is a unique proposition as it sits immediately adjacent to the Royal London Hospital, one of the largest teaching hospitals in Europe and home to Barts Health's new Clinical Research Facility.

Whitechapel is also home to QMUL's campus centred around the Blizard Biomedical Research Building. With over 30% of the population already employed in healthcare, the area plans to expand further with 1.5 million square feet of predominantly commercial life sciences space, as well as retail, residential and community engagement spaces, with support from various private sector partners, including BGO & Lateral.

The area already has a highly sought-after 40,000 square feet lab incubator managed by Queen Mary Bioenterprises, housing companies like AstraZeneca. To support scaling companies with access to talent, QMUL's new Precision Healthcare Research Institute and Digital Environment

Research Institute will also be integral parts of the cluster in Whitechapel.

Upon full development, Whitechapel will encompass approximately 4 million square feet, generating around 13,000 direct jobs with a gross value added (GVA) of £1.2 billion annually.

Canary Wharf, just five minutes away, already comprises over 20 million square feet of office, retail and residential space. It is home to significant entities like Genomics England, the MHRA, the UK Health Security Agency, the General Pharmaceutical Council, and growing companies such as AviadoBio.

Canary Wharf Group and Kadans Science Partners are now building a single 823,000 square feet "vertical campus" which is set to be the largest life sciences development in Europe. Plans also include outline consent for an additional 2.6 million square feet of life sciences buildings, with flexibility to incorporate residential properties if needed. As part of the broader estate, Kadans has recently opened a new fully-fitted 40,000 ft² CL2 lab Innovation facility.

Across both locations, companies will be adjacent to the globally-significant financial sectors in the City of London and Canary Wharf. The recently opened Elizabeth Line provides rapid transport linking Whitechapel and Canary Wharf and connecting them seamlessly with Heathrow Airport and the UK's busiest train stations.

Put simply, the area will provide everything that Life Science companies need to succeed. Whether in the Cluster in Whitechapel or in the Canary Wharf Cluster, Barts Life Sciences offer industry partners a streamlined access to deep technical expertise and cutting-edge research and clinical capabilities together with a route to market into the largest Trust in London. ■

We're eager to engage industry and academic partners who share our commitment to improving health outcomes and reducing health inequalities.

For more information on becoming involved with Barts Life Sciences, please visit: bartslifesciences.org or email info@bartslifesciences.org