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## Where world-leading research meets global commercial success

The UK Innovation Corridor has a unique ecosystem of talent and commerce, with world-class businesses, universities and R&D centres standing firmly on a heritage of ground-breaking discovery and invention.

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# INTRODUCTION

The UK Innovation Corridor's ecosystem of academic research, thriving companies, and a highly skilled talent pool make it a perfect place to start and build a company and invest in place-making.

Three dynamic factors have led to continued investment and start-ups by innovative technology-based companies, as well as significant commercial real estate investments in recent years:

- The existing presence and continued expansion of technology-based businesses serving global markets
- The global research leadership and talent base present in UKIC
- Place-making for innovation

We're continuing to transform how we design and create places for innovation, facilitating high amenity communities that foster collaboration. This is evident in the recent investments planned and occurring in Cambridge Science Park, The Wellcome Trust Genome Campus, Granta Park®, and Harlow Science Park.

This short report highlights our continued advantages and strengths for supporting continued growth in knowledge-based industries.



Dr Ann Limb CBE DL

Chair

London Stansted Cambridge Consortium

## WHERE GLOBAL SCIENCE AND TECHNOLOGY BUSINESSES THRIVE

THE UK INNOVATION CORRIDOR (UKIC) is all about next generation science and technology, powered by London and Cambridge. The Corridor is a radial economic geography based on two major rail lines (the East Coast Mainline and West Anglia Mainline) and three roads (the A1(M), A10 and M11). These link north and east London through Hertfordshire and Essex to Cambridge and Peterborough. At either end of the Corridor are the two globally-recognised Mayoral Combined Authorities (MCAs) of London and Cambridgeshire and Peterborough. Nearly one in seven UK jobs lies within ten kilometres of the Corridor and its workforce of 1.8 million people currently delivers productivity which is 16% higher than the UK average.

UKIC is promoted through a voluntary body, known as the London Stansted Cambridge Consortium (LSCC). The LSCC provides advocacy, brokerage, and coordination on behalf of UKIC's partners. Primarily this takes the form of the promotion of the region's economy and infrastructure by harnessing its collective strengths as a globally-renowned and competitive Corridor for biomedical sciences, advanced technology, and business innovation.

### *Knowledge-based industries account for one-fifth of all jobs across the corridor*

The UK Innovation Corridor (UKIC) area has significant specialisation in Life Sciences; Agri-tech; ICT, Digital and Media; and Business Services. Both Life Sciences and ICT, Digital and Media are around twice as specialised as the country as a whole. The concentration of knowledge-focused businesses is also 50% higher than the rest of the UK. With 242,800 employees in ICT, Digital and Media the Corridor is home to leading multinational tech giants and innovative new start-ups. From the Cambridge Cluster through to Hertfordshire's technology businesses, and Tech City in London, the UKIC is a world leader in artificial intelligence. 17% of all life sciences employment in England is based in the UKIC. This success is built upon 37 research institutes.



Nearly **one in seven UK jobs** are located within 10km of the UK's Innovation Corridor



**Businesses** in the region collectively **turn over £127 billion a year**



A population of **2.7 million residents** and a workforce of **1.8 million people**



**Productivity is 16 per cent higher** than the national average, and growing



Post-recession **jobs growth is two and a half times** the UK average



**Growth** in the UK's Innovation Corridor **has outpaced all other parts of the country** over the last decade.

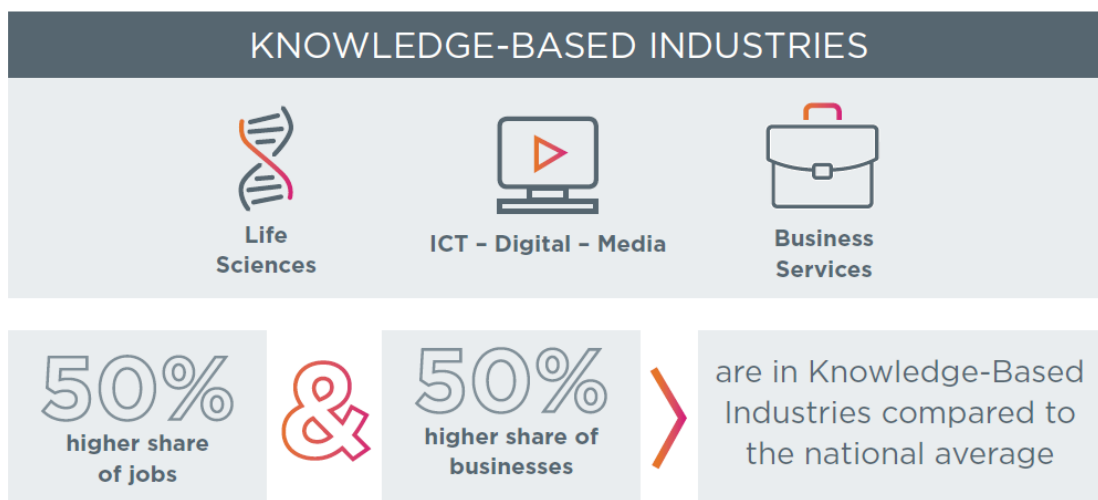
## Industry networks

The UK'S leading industry networks are based here, including **One Nucleus**, the global life sciences industry network; **CW** (Cambridge Wireless), the leading international community for the application of wireless, mobile and associated technologies; **Agri-Tech East**; and the **Stem Cell Network**.

## UKIC's start-up support institutions are world-renowned

The **Babraham Research Campus** in Cambridgeshire is the UK's leading provider of support to early-stage bioscience enterprise. Recent successes include Bicycle Therapeutics, whose collaboration with Cancer Research UK has secured a prestigious Scrip Award, winning 2017's Best Partnership Alliance. In partnership with BioMed Realty, an additional one million square feet of laboratory and commercial space are being provided between 2017 and 2020.

The **Anglia Ruskin MedTech Campus** provides support to firms and new accommodation and facilities in the medical and assisted living technologies and service businesses sector across three sites in Chelmsford, Harlow and Southend-on-Sea. In recognition of the massive success and talent-base for life sciences research in the UKIC area, Public Health England has chosen Harlow as the location for its new national public health campus.



**Stevenage Bioscience Catalyst** (SBC) is the UK's first open innovation bioscience campus, which is co-located with GSK in Stevenage. Open since spring 2012, it focuses on open innovation, partnership, idea sharing and value generation between academia, big pharma and biotech.

Specialist start-up incubators are available at **St John's Innovation Centre**; and the **Bradfield Centre** is a new centre for technology start-ups and scale-ups that can support 600 entrepreneurs within Cambridge Science Park.

The newly opened £12m Innovation Centre Knowledge Gateway is based on the **University of Essex's** Colchester campus. The Innovation Centre will deliver flexible workspace and support for up to 50 enterprises plus space for the University's student start-up programme and a digital creative collaborative studio. The University has just been designated a University Enterprise Zone.

# WORLD-LEADING RESEARCH AND SCIENTISTS

## *Leading global research in the life sciences*

The UK **Medical Research Council** has a national laboratory, 9 national centres, and 8 research units in the UK Innovation Corridor. Five out of eight national Biotechnology and Biological Sciences Research Council Centres (BBRSC) are located in or adjacent to the area – including the Babraham Institute, the Earlham Institute, John Innes Centre, and Rothamsted Research.

Alongside major London teaching hospitals, **UCL**, The **London School of Hygiene and Tropical Medicine**, the **Royal Veterinary College** and **Francis Crick Institute** conduct world-class research - particularly in dementias, emerging infectious diseases including anti-microbial resistance and musculoskeletal pathology associated with ageing. The **MRC Laboratory for Molecular Biology**, based on Cambridge Biomedical Campus has made revolutionary contributions to science, such as pioneering X-ray crystallography to determine protein structures, the sequencing of DNA and the development of monoclonal antibodies. Eleven Nobel Prizes have been awarded for work carried out by LMB scientists. Located in Hinxton, Cambridgeshire, **The Wellcome Sanger Institute** is the premier centre of genomic discovery and understanding in the world.



**Cambridge University** in partnership with the Cambridge University Hospitals NHS Foundation Trust is a National Biomedical Research Centre for Brain Injury and Repair; Cancer; Cardiovascular Disease; Dementia and Neurodegenerative Disorders; Genomics; Immunity, Infection and Inflammation; Mental Health; Metabolism, Endocrinology and Bone; Population Health Science; Transplantation and Regenerative Medicine; and Women's Health.

The region's innovative firms continue to push the boundaries of technology and science for new healthcare solutions.

**GlaxoSmithKline** has teamed up with Verily, the life sciences arm of Alphabet, Google's parent company, to form a UK-based venture called **Galvani Bioelectronics**, dedicated to the nascent field of bioelectronic medicine. Headquartered within GlaxoSmithKline's global R&D centre in Stevenage, the facility will initially employ 30 scientists, engineers and clinicians.

## *UKIC's universities and research institutes are at the forefront of research in digital, data, AI and cybertechnology*

The **University of Cambridge's Computer Laboratory** is the premier research department in the UK for computing and has led to the founding of 188 companies. With its 200 researchers, The Computer Laboratory conducts world-leading research in artificial intelligence, computer architecture, digital technology, graphics and interaction, natural language and information processing, programming, logic, security and systems. The **University of Essex**, **University of Hertfordshire**, **University of East Anglia**

and [Anglia Ruskin University](#) also bring considerable research excellence, including in emerging specialisms such as predictive analytics, deep learning, pervasive Internet-of-Things, resilient converged digital network management, and on-line digital gaming and animation.

The [Kings Cross Knowledge Quarter](#) has a number of world renowned research institutes and departments for computing, machine learning and data science. [UCL](#) is the highest ranked university for computer science in the UK by grade point average, with world renowned centres including the Centre for Computational Statistics and Machine Learning, the Centre for Data Science and the Big Data Institute. City, University of London and Birkbeck also offer extensive capabilities. The Knowledge Quarter also hosts the [Alan Turing Institute](#), the national institute for data science and artificial intelligence, based at the British Library. Other national data science institutions based in the Knowledge Quarter include the [Digital Catapult](#).



## *Engineering and manufacturing*

Headquartered in Granta Park in Cambridgeshire, [TWI](#) specialises in innovation, knowledge transfer and in solving problems across all aspects of manufacturing, fabrication and whole-life integrity management across five UK and 13 overseas facilities, employing 800 employees.

The [Institute for Manufacturing](#) (IfM) is part of the University of Cambridge's Department of Engineering and is a multi-disciplinary teaching and research centre, conducting world-leading research.

## *The UKIC area has access to a workforce of three million people – half of which (1.5 million) are educated to degree level*

There are three million people of working age within the functional economic area of the UK Innovation Corridor, representing 7.4% of the UK workforce. 42% of the working age population is aged between 16 and 34, compared to 38% nationally.

Half of the UKIC workforce has degree-level qualifications or higher. The UKIC's functional economic area has 1.5 million workers with degree-level qualifications or above, representing 49% of the workforce – higher than the UK rate of 39%. The UKIC area has access to 9% of the UK's graduate labour. 200,000 Science, Research, Engineering and Technology Professionals and Associate Professionals work in the UK Functional Economic Area – representing 8% of the UK total.

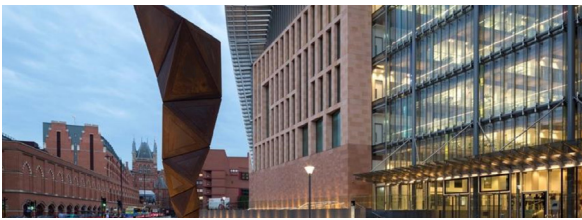
UKIC's future workforce needs are supported by 10 outstanding higher education institutions. There were 188,000 higher education students enrolled in the UKIC area's institutions in 2018. Each year 39,000 students qualify with undergraduate degrees, and 29,000 students qualify with postgraduate degrees, representing 8% and 10% of the UK total respectively. The UKIC area accounts for 12% of all Doctoral students qualifying each year in the UK. UKIC's universities include: ARU (Anglia Ruskin University), The Royal Veterinary College, The University of Essex, Middlesex University, the University of Cambridge, The University of Hertfordshire, and UCL.



## PLACE-MAKING FOR INNOVATION

### *Transforming how we design and create places for innovation*

The UK Innovation Corridor is where the future of place-making for innovation is being demonstrated. From the concentration of research and knowledge assets, international transport hubs and commercial investment in the Kings Cross Knowledge Quarter, to the expanding Wellcome Trust site in South Cambridgeshire with its community-building approach, we can see new models of place-making emerging to meet the needs of innovative organisations and their talent-base.



**KQ (KINGS CROSS KNOWLEDGE QUARTER)** is the focal point for one of the greatest knowledge clusters in the world, located in a small area around King's Cross, the Euston Road and Bloomsbury. KQ is a consortium of partner organisations made up of over 100 academic, cultural, research, scientific and media organisations, large and small: from the British Library, Google and the Wellcome Trust to Arts Catalyst, Scriberia and the Wiener Library.

**THE WELLCOME GENOME CAMPUS AT HINXTON** has outline permission to expand to provide 150,000 square metres of space for employment, conferencing and supporting facilities. Plans also include up to 1,500 homes for campus-based staff, 30 per cent of which will be affordable, a new school, a nursery, community facilities, public open spaces, allotments, a fitness centre and a health centre. It is estimated that around 4,300 new jobs will be created by the expansion of the campus.

**PUBLIC HEALTH ENGLAND (PHE)** is the expert national body that fulfils the Secretary of State's statutory duty to protect health, address health inequalities, and promote the health and wellbeing of the nation. In 2016 the decision was made for the multiple locations of PHE to be consolidated on a new Public Health Campus in Harlow Science park by 2024, where national specialist public health services, translational research and commercial activities can interact and thrive, provide unified national microbiological reference laboratories for UK and international use.



## *Commercial real estate investment continues to provide the quality premises and collaborative environments for innovation success*

**CAMBRIDGE SCIENCE PARK** is a 152 acre site, with 65 buildings providing 1.8 million sq ft of space for 120 R&D and technology businesses. The next 5 years will see upgraded landscaping and amenities, and 400,000 sq ft of new accommodation, including a new Bio Innovation Centre. Occupiers include AMGEN, AstraZeneca, AVEVA, Bayer Cropscience, Cambridge Consultants, CITRIX, Cambridge Wireless, Flexenable, Grant Thornton, Huawei, Jagex, NAPP, Owlstone Medical, Roku, Toshiba, Worldpay, and XAAR.



**CHESTERFORD RESEARCH PARK** is home to innovative biotech companies, set in 250 acres and providing up to 1 million sq ft of space, with 350,000 sq ft is already occupied. Occupiers include Astrazeneca, Arecor, Camena, Cell Centric, Charles River, Domainex, Evonetix, Isomerase Therapeutics, Oncologica, Oxford Nanopore Technologies.

**GRANTA PARK** provides 1.2 million sq ft in 17 buildings for life sciences and biotech firms, on a high amenity campus. Planning permission and masterplan allows for a further 500,000 sq ft of pre-let developments. Businesses on Granta Park include Illumina, Medimmune, Pfizer, PPD, Sphere Fluidics, Vernalis, Gilead, One Nucleus, CRUK, and Lonza.

**BABRAHAM RESEARCH CAMPUS** is the home of the Babraham Institute, a world-renowned life sciences research institute. It is also home of Babraham Biosciences Technologies which is responsible for the commercial development of the campus, including incubator space, laboratory and office space, and, in partnership with BioMed Realty, 900,000 sq ft of space for life sciences, which will open in April 2020.

**HARLOW SCIENCE PARK AND KAO PARK** is a newly redeveloped and extended science and technology hub 30 minutes from London and Cambridge. Located on the Harlow Enterprise Zone in Essex, Kao Park combines Grade A office accommodation and a state-of-the-art data centre. Current occupiers include Public Health England, Pearson, Teva Pharmaceutical Industries, Arrow Electronics, and Raytheon.



## PLACE-MAKING FOR INNOVATION

### *With development sites for further expansion and growth*



**ALCONBURY ENTERPRISE CAMPUS** offers flexible, bespoke business space for businesses from 250 to over 500,000 sq ft (12 – 46,450 sq m).

**CAMBRIDGE BIOMEDICAL CAMPUS** has provided 2.4 million sq ft of development alongside the existing 17,500-strong community of healthcare professionals and research scientists at the Addenbrookes site.

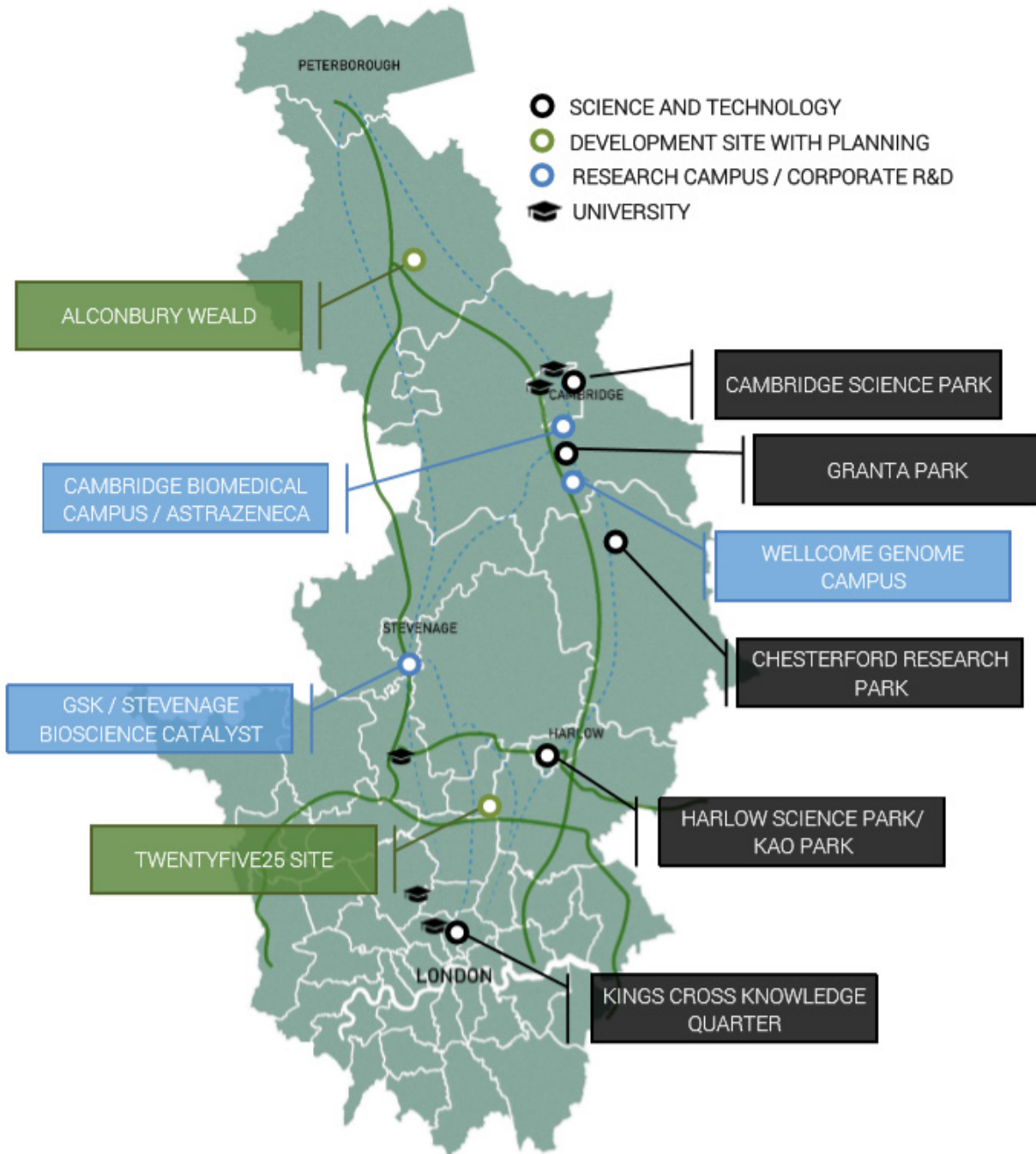
**TWENTYFIVE25** is a 36 ha site based in Broxbourne for a new headquarters / business / science park 30 minutes from London with immediate access to the M25.


**MARSHMOOR** is a 13.5 ha site in Welwyn Hatfield, proposed for 270,000 sq ft of high quality office and laboratory space adjacent to Welham Green railway station near the A1(M) and M25.

### *Meeting the demand for innovative place-making: UKIC is a successful place to invest in real estate*

There are 55 properties in the UKIC area, outside of London that are rated 4 or 5 star by CoStar in the category of office, light industrial and specialized uses, totalling 2.7 million square feet. In October 2019, there was 112,000 square feet of vacant property, a 4.7 per cent vacancy rate, and an average rent of £28.02 per sq ft.

Recent investors in commercial property in the UKIC area include: Aviva, Legal & General Group plc, JP Morgan Chase & Co, Zurich Assurance, the University of Cambridge, The Royal London Mutual Insurance Society Ltd and Deutsche Bank AG.



THE  UK's  
INNOVATION  
CORRIDOR