

At a glance

Life sciences in London and the south east



Welcome

The 'golden triangle' is the world-leading life sciences cluster of London, Oxford, Cambridge and England's greater south east.

At a glance: Life sciences in London and the south east has been created to help you navigate this exciting ecosystem. It provides a snapshot of this evolving community, its current strengths and the plans for future investment and growth.

This cluster is a rich network of renowned research centres, healthcare providers and medical charities, innovative SMEs and large industry players, all based within a compact and well-connected geographical region.

This region is a hotbed of innovation, home to:

- » **four of the world's** top 10 universities
- » **five out of seven** of the UK's academic health science centres
- » **leading medical research institutes** including the Wellcome Trust, the Medical Research Council, Cancer Research UK, and the national Cell Therapy Catapult, focusing on stem cell research and industrialisation.



Imperial West, co-locating world-class researchers, businesses and higher education partners.

The golden triangle is being boosted further by a wave of significant new investment, including:

- » **The Francis Crick Institute** – bringing together 1,500 scientists under one roof
- » **Imperial West** – co-locating researchers and businesses on 25 acres
- » **UCL East** – a cross-discipline enterprise and innovation centre focused on health and biological technologies on the site of Queen Elizabeth Olympic Park
- » **The Institute of Cancer Research** – creating the world's second largest cancer research campus in south London
- » **AstraZeneca's Global R&D Centre** – bringing together 2,000 employees in Cambridge

To maximise this wave of new investment MedCity was launched in April 2014. This unique enterprise is your portal to the diverse expertise, innovation and infrastructure of the region. Whether you are looking for academic, healthcare or business partners, research infrastructure, office and incubator space or guidance through tax and regulatory processes, MedCity is here to help.

medcitylondon.com
+44 (0)20 7691 3588

A world-class centre for clinical research

London is home to a highly diverse population supported by a large single healthcare system that maintains extensive patient records – over eight million patients use the NHS in the capital, over a third of whom were born outside the UK.

This concentration of diverse patient groups in a small geography makes it easier and faster to set up complex trials, and identify and recruit the right patient groups working across primary care, general hospital and specialist clinical services.

Clinical research within the National Health Service is supported by the National Institute for Health Research, which provides:

- » **a single point of contact** for industry studies
- » **centralised and coordinated** study feasibility assessment
- » **support** with patient recruitment.

It also runs the Coordinated System for gaining NHS Permission (CSP), which streamlines the process of gaining permission to carry out clinical trials within the NHS.



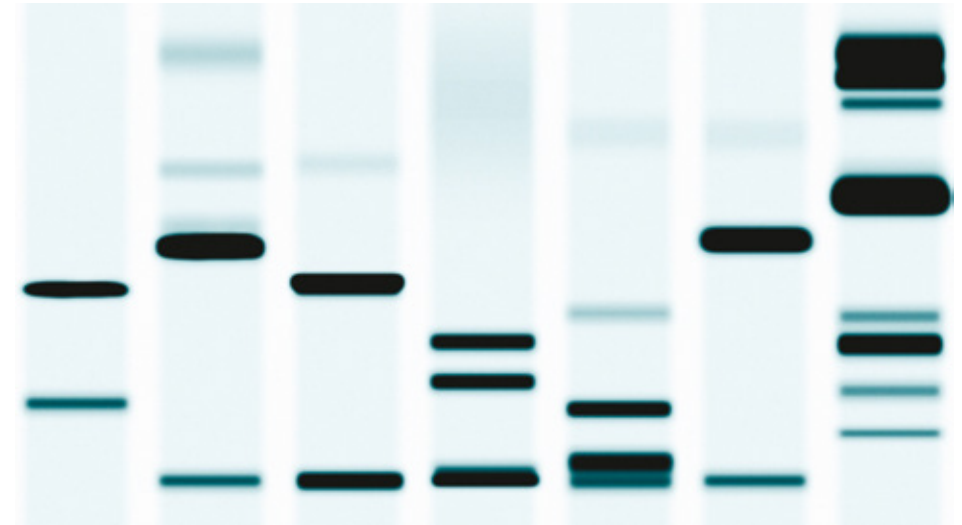
Leading the genomics revolution

Launched in 2012, the UK-wide 100,000 Genomes Project will sequence 100,000 genomes in four years; an immensely ambitious project that has never been done on this scale anywhere in the world.

By providing better insight into the causes of diseases and how diseases develop in each individual, genomics can be used to make medicine more tailored and personalised, minimising unwanted side effects.

Eleven genomic medicine centres have now been set up to support the project, including five in London, Oxford and Cambridge. They are recruiting people with cancer or rare diseases and their families to take part in a project that will bring benefit to patients for years to come.

genomicsengland.co.uk



Financial strength

The UK biotechnology, healthcare and life sciences industries offer a wide range of investment opportunities with diverse business models.

2014 saw robust levels of public market activity in healthcare, with £1.25bn (\$1.9bn) raised in life sciences IPOs and follow on offerings on the London Stock Exchange.

Over the past five years, the FTSE Healthcare Indices have significantly outperformed others, with the FTSE All Share Healthcare Index rising by 10% in 2014, compared to a 3% drop for the FTSE All Share.

The UK has the largest pipeline of new pharmaceutical product candidates in Europe, with over 460 in 2013.



Abcodia and the world's largest clinical trial

Case study



University College London spin-out Abcodia is commercialising technology licensed from Massachusetts General Hospital to develop the world's first ovarian cancer diagnostic with accuracy high enough to be applied to population screening.

The test defines what a woman's healthy level of CA125, a substance in the blood, should be and detects the rise early should ovarian cancer start to develop. It has been validated in the world's largest prospective clinical trial, which recruited over 202,000 women over 10 years and is managed by University College London.

The trial also generated a biobank of 5.5 million serum samples that can be used to develop and test other diagnostics for early detection of cancer and other diseases of aging. The serum is stored in the UK by ThermoFisher.

The clinical trial will report this year. Results indicate that this test has huge potential to enable early diagnosis at a stage when women are not showing any symptoms of the disease, hopefully leading to improved survival rates.

Pfizer and the rare diseases consortium

Case study



Better therapies for rare diseases are the target of a consortium made up of Pfizer, the University of Cambridge, Imperial College London, King's College London, University College London and the University of Oxford, coming together to undertake joint drug discovery programmes.

There are around 6,000 recognised rare diseases, which collectively affect 60 million people across Europe and the USA, and 80% of these are thought to have a genetic origin.

Analysis of patients' genomes allows researchers to identify the pathways that cause disease, enabling the targeted design of new treatments.

One outcome of the partnership is Pfizer's new London Gene Therapy Unit, headed by King's College London's Professor Michael Linden, which will focus on rare diseases.

Useful contacts

London & Partners

London & Partners are the experts on doing business in London, helping overseas businesses set up and grow in the capital.

+44 (0)20 7234 5800
business@londonandpartners.com
invest.london
@L_PBusiness

Academic centres

University of Cambridge
cam.ac.uk

Imperial College London
imperial.ac.uk

King's College London
kcl.ac.uk

University of Oxford
ox.ac.uk

Queen Mary University of London
qmul.ac.uk

University College London
ucl.ac.uk

Healthcare centres

Cambridge University Health Partners
cuhp.org.uk

Imperial College Academic Health Science Centre
ahsc.org.uk

King's Health Partners
kingshealthpartners.org

Oxford Academic Health Science Network
oxfordahsn.org

UCLPartners
uclpartners.com

Research institutes

Cell Therapy Catapult
ct.catapult.org.uk

Francis Crick Institute
crick.ac.uk

Institute of Cancer Research
icr.ac.uk

Medical research charities

Cancer Research UK
cancerresearchuk.org

Medical Research Council
mrc.ac.uk

Wellcome Trust
wellcome.ac.uk

Clinical trials support

National Institute for Health Research
nih.ac.uk

Membership organisations

BioIndustry Association
bioindustry.org

OBN
obn.org.uk

One Nucleus
onenucleus.com



Find out more

**MedCity can help you to access,
invest in and collaborate with
life sciences activity across
London and the south east.**

contact@medcitylondon.com

+44 (0)20 7691 3588

medcitylondon.com

 **@MedCityHQ**

Photo credit cover image: View of the Francis Crick Institute from St Pancras International © Justin Piperger Photography/Wadsworth3.
Images inside kindly provided by Abcodia, King's Health Partners and Imperial College Academic Health Science Centre.