

[Press release: UK joins world-leading research programme to help develop medicines of the future](#)

The European XFEL accelerator tunnel. Credit: European XFEL

- UK signs agreement to work with other countries to create new medical treatments using a powerful laser
- super-strength laser acts like a microscope to help understand deadly viruses
- the UK joins existing member countries including, France, Germany, Italy and Switzerland

The UK will be at the forefront of the fight against life-threatening diseases after confirming that it has signed the European X-Ray Free-Electron Laser (XFEL) convention in Berlin, Germany today (19 March). The XFEL programme uses a super-strength laser to help understand life-threatening viruses.

The UK's membership of XFEL reinforces the government's modern [Industrial Strategy](#), and through the [Ageing Society Grand Challenge](#), the government is committed to harnessing the power of innovation to create the treatments of the future and maintain our position of being a world-leader in science, research and innovation.

The XFEL, one of the most powerful X-ray machines ever built, acts like a huge microscope, using intensely bright and short duration X-ray flashes which will enable scientists to map the atomic details of viruses. The laser also allows scientists to look in greater detail to the composition of cells, take 3D images of atoms and molecules and study processes such as those occurring deep inside planets.

Science Minister Sam Gyimah said:

The incredible XFEL will help us better understand life threatening diseases by using one of the world's most powerful X-ray machines. Working with our international partners, the super-strength laser will help develop new medical treatments and therapies, potentially saving thousands of lives across the world.

Through our modern Industrial Strategy we are investing an extra £4.7 billion into research and development. I am determined that we continue to secure our position as being a world-leader in science, research and innovation and I can't wait to see the results that come from our participation in this extraordinary project.

STFC designed and built LPD detector. Credit: European XFEL

British engineers from the Science and Technology Facilities Council (STFC) have already built the advanced camera for XFEL, called the Large Pixel Detector (LPD). The camera operates at a frame rate of 4.5MHz – 4.5 million pictures per second.

The UK has been involved with XFEL since 2008, contributing £30 million towards the construction of the facility, and every following year we will contribute £2.5 million towards operations costs.

STFC have also contributed a number of UK researchers who are currently working at the facility. The UK has also developed a training facility at the Diamond Light Source on the Harwell campus in Oxfordshire for British scientists. The UK XFEL life sciences hub will enable users to fully prepare for their experiments with XFELs.

[News story: Princess Royal unveils plaque at official opening of nuclear archive](#)

The Princess Royal unveiled a stone plaque to mark the official opening of Nucleus

The Princess Royal toured the NDA's £21 million facility in Wick accompanied by Chief Executive Officer David Peattie, who said:

We are extremely honoured to have received a visit from The Princess Royal to open Nucleus. It has been fantastic to see this important project come to fruition as a resource to preserve records from the country's nuclear industry, as well as historical material from the Caithness region.

Her Royal Highness was greeted on arrival by Her Majesty's Lord Lieutenant of Caithness, Viscount Thurso. Also among the invited guests were the Lord Lieutenant's wife Lady Thurso, former Lord Lieutenant Miss Anne Dunnett, MP Jamie Stone, MSP Gail Ross, representatives from Dounreay Stakeholder Group and local councillors.

During the tour, The Princess Royal met key staff from the archive's operations team, who described how the documents were prepared, indexed, stored in a series of secure pods, with humidity and temperature kept stable to minimise the potential for deterioration. Mr Peattie addressed assembled

guests and staff before inviting Her Royal Highness to unveil the plaque.

Nucleus has a dual role: as well as records from the country's nuclear sites, Nucleus houses a collection of local Caithness records that have outgrown their existing home.

Since opening last February, an exercise has been under way to transfer plans, photographs, drawings and other records from diverse nuclear locations. The first collection to arrive came from nearby Dounreay and is being followed by Harwell records.

The painstaking 'sift and lift' process, expected to last at least 5 years, requires millions more documents to be examined before being either destroyed or carefully indexed and packaged for the move north.

Sellafield Ltd alone has more than 130,000 boxes of archived records in off-site storage, plus material on site and in various offices – estimated as stretching, if laid out, to more than 120km worth of paperwork. The 12 Magnox Ltd sites have a similar-sized collection in storage. The number of electronic records across the estate is believed to number hundreds of millions.

Eventually, decades-worth of records, both digital and hard copy, will be housed at Nucleus where they will be available for ongoing research. The facility will also fulfil an important role for a future geological disposal facility (GDF) that is being developed for the UK, acting as a central repository for detailed waste records that will be safeguarded for many generations.

Earlier this year, Nucleus was granted [Place of Deposit status](#) by The National Archive at Kew, following a rigorous assessment of all operational aspects. It is one of the largest accredited repositories outside London. The building's sleek, angular lines have also collected two prestigious design awards from the Architects' Journal including Public Building of the Year 2017.

[Further background on the nuclear archive facility](#)

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Speech: City minister: Innovate Finance Global Summit speech

Fantastic to see entrepreneurs, the giants of tech and finance, and the emerging players in FinTech under one roof...

...to celebrate the success of UK FinTech...

...and chart a future for the industry.

But we don't need to navigate too far from our shores to witness how far we have come.

As a former Heritage Minister, I can see this link between our past, however ancient, and the present.

We should walk over to Bloomberg's new headquarters at Queen Victoria Street...

...and admire the 405 Roman tablets found during its construction.

My favourite is an old promissory note detailing the payment of 105 denarii from Tibillus to Gratus – which is now the earliest dated document found in Roman Britain.

The irony that this was an ancient financial contract found in the heart of London...

...on a tablet, roughly the size of an iPad...

...didn't escape anyone in the City!

As it always has been: the fulcrum of our financial future is right here – in London, and across the UK.

All of you are the levers – moving in tandem (and in healthy competition!) – to oil the engines of growth.

The world is changing so quickly that it would be an act of hubris to predict anything.

But one thing feels certain: you will all play a role in shaping that future.

Because FinTech will continue to transform the way we live our lives.

I'm very pleased to be here at IFGS kicking off UK FinTech week...

... a week packed full of great events from Edinburgh, Leeds, the University of Durham, the London Stock Exchange, the FCA and the Treasury's own International FinTech Conference...

... I wouldn't be doing my job unless I told you there is time for investors to register for this great event...

... an opportunity to hear from the Chancellor and other global leaders...

...about all we are doing to make the UK a great place to invest.

I would like to thank Innovate Finance – at the epicentre of the FinTech ecosystem – for doing such a great job in supporting this mandate.

This event is FinTech in microcosm...passion, drive, and ingenuity distilled into two days.

It is only right that the sector is brimming with confidence – the UK is the best place in the world for FinTech...

...and as Economic Secretary my mandate is to ensure it remains as such.

Today I have two intentions...

...first, to celebrate our status as a leading global FinTech hub...

...the second is to look at how we remain the leading global FinTech hub.

We are a leading FinTech hub

I hear rumblings from across the Channel that President Macron is looking to drag you all over to Paris. And I understand why – it's a great city. So, hop on a Eurostar, enjoy a weekend away, stock up on croissants etc. Then come on back to London on Monday morning to carry on making money/go back to work/crack on as you have been

... because President Macron can't argue against hard truths: that the FinTech sector is estimated to be worth over £6 billion to the UK economy...

...generating a staggering 60,000 jobs across 1,600 firms...

...a greater number than work in New York's FinTech sector, or in the combined FinTech workforce of Singapore, Hong Kong and Australia.

And London has been independently verified by Deloitte as Europe's best city to launch a FinTech firm.

They said of London: "it has "the 'fin' of New York, the 'tech' of the U.S. West Coast ... all within a 15-minute journey on public transport".

For the pundits – the economic case for supporting UK FinTech is compelling.

2017 was the best year on record for venture capital investment in UK FinTech.

It saw £1.3bn invested – spanning 224 deals, representing a 153% increase on 2016.

54% of this funding came from abroad: a strong, international, vote of confidence.

This is not by accident but by design – we have the talent, the minds, the markets, and the regulatory and tax environment.

And the UK is now in the enviable position of being the global leader in FinTech.

We don't want to shift gears, or resort to complacency – but keep up the momentum, and remain the global leader.

What will this position of sustained global leadership look like? What are the ingredients to make this a reality?

I can think of three: competition, capital, and connectivity.

Competition

I strongly believe that the free market is the key to create wealth and fuel innovation.

Driven by this compelling economic logic, the government champions robust market competition.

So we welcome innovation in the delivery of financial services that promotes competition.

And we know that government has a role to play in supporting a competitive environment...

...and we fully embrace our position as a partner of British enterprise and of FinTech.

But government backing is not, and should not be a blunt or misdirected instrument.

Our regulators also appreciate this: which is why they rank amongst the most robust in the world...

...because the economy moves rapidly, so we need regulators to keep up and move at pace.

Take the explosion of growth in crypto-assets.

While the pipeline of opportunity presented by the underlying technology is immense, crypto-assets (such as Bitcoin) may pose risks.

So in our upcoming Fintech Sector Strategy, the government will announce further work with the FCA and Bank of England to consider these issues in more detail.

And more generally, policies have been implemented to intelligently support the environment in which FinTech operates.

The FCA has risen to this challenge, setting up Project Innovate and the Regulatory Sandbox, seen as the global gold standard in terms of support for FinTech by a regulator.

In 2015 the government also established the Payment Systems Regulator – the first of its kind worldwide – with statutory objectives to promote competition and innovation in payment systems.

Government is in the privileged position to ensure that firms have both the right incentives, and the right environment to deliver cheaper, better products to consumers.

Capital

The firms you represent are the future: the digital economy is growing faster than the wider economy. Which is why this government is backing you to the hilt.

At Autumn Budget 2017, the government launched a 10-year action plan to unlock over £20 billion to finance growth in innovative firms.

This includes a commitment to support new technologies...

...improving the domestic skills pipeline by expanding the range of technical education opportunities...

...and overhauling the UK's digital infrastructure, including rolling out our first 5G networks.

But we're not just helping companies get off the ground. We want to help you build your businesses into the sky.

Since 2010, the government has reduced the rate of corporation tax from 28% to 19% today, the lowest in the G20.

And we have legislated for corporate tax rate to fall further, to 17% in 2020.

You will be able to keep more of what you earn, and invest more in yourselves to stay ahead of the pack.

We are doubling annual investment limits in EIS and VCTs for knowledge-intensive companies, and their investors.

We also know that it's important that companies continue to evolve and stay ahead of the competition.

So since 2013, we have doubled the generosity of R&D tax credits for SMEs.

We are backing this up with direct support: since 2016, we have announced

£7bn of investment in science and innovation.

Connectivity

Despite the strides made, FinTech is not “done” – we are very much at the start of this story.

My priority is to ensure that FinTech continues to function in a way that works for all – and delivers benefits across society...

...as a force for positive change right across the UK.

FinTech has enormous potential to transform financial inclusion...

...through the democratic power of information and universal connectivity.

This connectivity is the natural by-product of such a dynamic ecosystem...

...by expanding access to the unbanked and the underserved...

...and unlocking invaluable support to people up, down, and across this country.

FinTech is a route to ensure that this happens – by helping people make the most out of their money.

Open Banking is a clear next step in this endeavour.

It empowers customers to make the most of their data, sharing it with FinTechs, giving them access to a better range of tailored products.

It opens the door to cheaper and more easily available loans for small businesses by making it easier for them to shop-around for deals.

The government has also launched the Rent Recognition Challenge.

Millions of families living in rented accommodation in Britain today are not getting access to credit.

That is because, currently, a history of meeting your rent payments on time is not reflected in your credit score, and is not taken into account when you come to apply for a loan, such as a mortgage.

The Treasury’s Challenge was designed to tackle this problem.

It offers a £2m prize fund to UK FinTechs, to develop new solutions enabling tenants to collect their rental data, and share it with lenders and credit reference agencies.

Today I am please to announce the six winners:

- Bud – a financial network allowing users to interact with all their finances in one place
- Canopy – a deposit-free renting service

- Credit Ladder – the UK’s first tenant rent reporting service for the private rental sector
- META Labs – who focus on harnessing digital data to support decision making
- Movem – a digital passport for tenant referencing
- RentalStep – a rental platform helping tenants boost their credit scores

Conclusion

Government has an important role to play in fostering a strong, enduring and competitive FinTech sector.

But if Britain is going to continue to lead the way forward in world FinTech – it is ultimately down to you...

...the companies, the universities, financial services firms, investors, accelerators.

Collaboration and cooperation will be vital in bring further innovation to fruition.

We won't be resting on our laurels...

...because that's one of the things about this industry...

...you have to keep moving, and you have to keep improving.

I often hear it said that necessity is the mother of invention.

But I challenge this...because it seems to me that our modern economy has exceeded the bounds of this proverb.

If necessity powers invention, how then do we explain the explosion of creation...

...that has come from mere curiosity...

...from questions asked by frustrated minds trapped in the confines of the 9-5...

...from students dreaming big in university halls?

It is a sign of our times that invention is no longer birthed by necessity...

...but by innovation which goes further than any of us thought necessary or possible.

I look forward to taking this conversation forward with you all.

Thank you very much.

News story: Helping providers understand implications of AEB devolution/delegation from 2019 to 2020

As part of the preparations for devolution/delegation the Department for Education have issued illustrative AEB allocations for 2018 to 2019 to MCAs and the GLA. These illustrative budgets give MCAs and the GLA an indication of the AEB they can expect to receive in the funding year 2019 to 2020. The budgets are based on 2016 to 2017 actual grant delivery and assumed 2017 to 2018 independent learning providers' delivery to learners resident in MCAs/GLA areas.

During the funding year 2018 to 2019, the ESFA will remain in control of the AEB and will continue to administer and manage in line with its current funding and performance management arrangements.

Once the budget has been devolved to MCAs and delegated to the GLA, they will be responsible for funding residents of their areas. ESFA will be responsible for funding residents of non-devolved areas.

The devolution/delegation of AEB will encompass all providers who deliver AEB provision irrespective of where the provider is geographical located, as it will be based on the residency of the learner.

Ministers have agreed to the ESFA funding nationally, for a period of 2 years following devolution (funding years 2019 to 2020 and 2020 to 2021), providers which meet the following criteria:

- qualify for a financial residential uplift for their learning provision, and
- receive more than two thirds of their income from the AEB, and
- predominantly target the most disadvantaged learners.

This will be to aid their transition to devolution/delegation given their specialist nature and reliance on AEB. The providers which currently meet this criteria are:

- Fircroft College, Birmingham,
- Hillcroft College, now part of Richmond and Hillcroft Adult and Community College London
- Northern College, Barnsley
- Ruskin College Oxfordshire

Traineeships for 19 to 24 year olds will remain a nationally funded programme with allocations provided by ESFA, regardless of where trainees reside.

Confirmation of the final AEB to be devolved/delegated to MCAs and the GLA

for the 2019 to 2020 funding year is expected in early 2019, once the functions necessary for the delivery of adult education have been transferred and the AEB budget for the that year has been finalised.

In preparation for full devolution/delegation, MCAs and the GLA will, during this coming funding year, refine their Strategic Skills Plans (outlining their adult education priorities), whilst further engaging with providers to ensure a smooth transition towards delivering these priorities. The ESFA will continue to support the MCAs and the GLA as they build sustainable relationships with providers and stakeholders.

Providers who wish to deliver AEB provision, post devolution/delegation, in one or more of the MCAs/GLA areas should start to build, if they have not already done so, effective working relationships with the relevant MCAs/GLA.