

Speech: Science Minister Sam Gyimah speaks on the importance of international collaboration to research excellence

Good evening. It's good to be in such esteemed company. I'm sure that there will be many interesting discussions this evening on the theme of how international collaboration strengthens research excellence, and I'm looking forward to meeting many of you.

I would like to thank the UK's Permanent Representation in Brussels and Wellcome for working together to bring us all here this evening, and I'm grateful we have Jeremy Farrar with us to talk about Wellcome's approach to international research collaboration. Their work is helping us find solutions to global challenges.

I would also like to thank Jeremy for the paper Wellcome published earlier this year: [Building a Strong Future for European Science: Brexit and Beyond](#), which explored UK-EU links on science and innovation.

Their conclusions were consistent with the findings in the [Lamy report, LAB-FAB-APP](#), published last year, and I feel they helped highlight the importance of strong cross-border relationships to mutual world-class research excellence.

I've been in post as Minister for Universities, Science, Research and Innovation since January. It's a fantastic brief, at an exciting time with plenty of challenges; from domestic issues such as making sure that students have a strong voice. To making clear what we think is important as part of our relationship in the area of science, research and innovation after we exit the EU.

I value the opportunity of being Minister in this role because of its strategic importance. Science is an area that really matters; that really can make a huge difference to people's lives. We are in the vanguard of such progress and have the opportunity to further knowledge – to build better, faster, cleaner technologies that will have a positive impact on our health, wealth and happiness.

A couple of weeks ago I spoke at an event celebrating UK-Spanish links in nanotechnology. Afterwards I visited the Cambridge Advanced Materials Lab and saw some really incredible science.

I saw technology that will bring the cost of manufacturing LED lighting down significantly, whilst improving its energy efficiency. Bringing affordable, low energy lighting to new markets and, in the UK's case, meaning that we have to build an estimated 10 fewer power stations because of the lower

energy consumption.

I learnt about plans for li-fi (Wi-Fi with light!), which will deliver sunlight substitutes for night-workers, who are currently more susceptible to certain types of cancer because lack of exposure to sunlight inhibits their ability to process vitamin D.

And I saw fantastic technologies that provide structures for new tissue growth in our bodies without the risk of rejection by our immune systems.

These researchers from around the world are creating ground-breaking solutions to technical challenges using nanotechnology. And what all of these projects have in common is that they are made possible by international cooperation.

The UK values international cooperation. That is why we will remain a leading power in science and innovation, and why our [Industrial Strategy](#) has a target that 2.4% of our GDP will go to R&D funding by 2027. We are committed to ensuring that this investment leads to real results for everyone.

In her speech last week, the Prime Minister set out the Industrial Strategy's first 4 missions:

- using Artificial Intelligence to improve cancer diagnosis rates, saving 20,000 lives a year by 2033.
- giving people another 5 years of healthy, independent life in their own homes by 2035.
- zero emissions for all new cars by 2040.
- and using new technologies and construction methods to halve the energy usage of new buildings by 2030.

We are also committed to remaining a place for scientists. Our success is built in part on the contribution of researchers and innovators who come to the UK from across the world to study, to research and to do business. Over half of the UK's researchers come from outside the UK. And, as the Prime Minister said, we will ensure that this does not change.

We have a proud history of being a home, whether temporary or permanent, to researchers. Figures like Srinavasa Ramanujan, Caroline Herschel – even Erasmus spent time in England.

When I visit research institutions, I am told how important it is to have access to the brightest and best talent in the world.

But that's not enough. Science and innovation flows by the exchange of ideas. And I think that we, who make decisions for science, have a duty to do all we can to facilitate this exchange.

We don't do this out of altruism. Supporting science improves people's lives, and innovation creates jobs.

The UK has been an active and valued member of the European Union's Framework Programmes. Participation has been good for us – our researchers and innovators have been able to build projects with partners from across Europe,

and beyond. Projects that deliver new knowledge and innovation.

The European Framework Programmes have fostered connections and sparked new ideas. They've built networks that will continue to generate ideas for years into the future.

The European Research Council has supported the very best researchers with long-term grants. Stephen Hawking's final paper was written in collaboration with an ERC grantee.

The Euratom Research and Training programme has pioneered nuclear research for decades. It is pushing the frontiers of knowledge in fusion technology, which could provide virtually unlimited clean energy.

Although we are leaving the EU, it's important to remember that science is an international enterprise and discoveries know no borders. We are all strengthened by our collaborative links.

This is why we want the option of full association to future EU Programmes like [Horizon Europe](#) and Euratom Research and Training. To do this, we need a balanced approach that is mutually beneficial. This means a fair financial contribution, a fair level of influence, and a fair level of access. Last week, we began to talk to the Commission's Task Force 50 about our future science, research and innovation partnership.

It was a positive meeting – and both sides agreed that research and collaboration are important. We will continue to explore various elements of this going forward. But here and now I wanted to unpack a bit what I mean by fair financial contribution influence and access.

Having the option to fully associate allows us to offer the very best of collaboration on science, research and innovation to our EU counterparts. Currently all Member States pay in to the pot to access [Horizon 2020](#) and will continue to do so for Horizon Europe.

Full association would mean a particular amount – of course it's too early in our discussions to put a figure on what this would be but based on existing precedents it would be billions of euros. Anything less than full association and we would need to consider whether this was a fair ask. I am accountable to the UK Parliament and would need to demonstrate that the amount contributed actually is fair.

On fair level of influence, we want to make sure that our voice is heard in discussions. Some of the EU bodies like ERAC and ESFRI and programmes like ETC (European Territorial Cooperation), already allow non-EU Member States to have a say over priorities. That is what we are looking for too.

On fair access – I don't think anyone would give money away for free. So again, I reiterate that our contribution both in terms of financial as well as on science excellence should be taken into account, so our level of access to Programmes is not constrained.

The UK has many excellent and emerging sectors where we partner on the global

stage and this is something we are very proud of, cooperation makes us stronger.

As Jeremy will no doubt tell you, we have one of the strongest and most productive life sciences sectors in the world.

Continued collaboration will ensure both the UK and EU get the best deal for patients.

This is why we want to explore the terms on which the UK could remain part of the European Medicines Agency.

We must support our researchers and innovators by working hard to give them access to the people and support they need to continue to produce world class research excellence.