

Labour Party Fringe 2021

Becoming A "Science Superpower": Will The UK Be Fit To Tackle The Next Global Crisis?

27 September 2021

Speakers:

- Chi Onwurah, shadow minister for business, energy and industrial strategy
- Professor Azra Ghani, fellow of the Academy of Medical Sciences
- Professor Doiminic Abrams, fellow of the British Academy
- Professor Susan Gourvenec, chair in emerging technologies, Royal Academy of Engineering
- Dr Rupert Lewis, chief science policy officer, The Royal Society
- Angela, FT (Chair)

Overview

The discussion focused on the UK's science power, post-covid challenges, using science to tackle inequality, and ensuring global status as a science superpower.

Summary

Angela asked Professor Azra Ghani, fellow of the Academy of Medical Sciences, to discuss the progress which had been made over the course of the pandemic, and how it could demonstrate the UK's capacity as a science superpower.

Ghani agreed in her capacity as an epidemiologist that the pandemic had demonstrated various strengths within UK science. Work had been ongoing for years with global partners on the likes of vaccine developments. Early on during Covid, scientists were able to engage with colleagues across the world – and the nature of this kind of collaboration was a major strength of UK science.

The UK was in this position because there had been investment in UK science for many years, for example in the likes of the Jenner institute. Specifically, it had come through global health research and funding through the aid budget, which predominantly focused on diseases which affected low- and middle-income countries. When the pandemic hit, scientists in this field were able to reskill and tackle vaccine development at pace. Ghani called for core funding so that people graduating university could continue studying and go on to do PhDs. Future generations had to be attracted to the sector; and the UK had to be open to researchers from other countries for this kind of progress to build and continue.

Science superpower

Angela asked Dr Rupert Lewis, chief science policy officer from The Royal Society, how a 'science superpower' was defined.

Lewis said the UK was already a science superpower. He said he would ask Government who the UK's strategic partners were.

Angela asked how the UK was able to respond to the pandemic so quickly.

Ghani said having the infrastructure was incredibly important; so too was human capital and having the right people and minds.

Post-covid challenges

Angela asked Professor Dominic Abrams what the main challenges were facing society following the pandemic.

Abrams said the degree of inequality across the country was a major issue. In science there was a mesh of interconnected expertise which could be used to bring sound advice to Government. That mesh was not there for the rest of society; but it was required to protect the most underserved communities. In communities where there was better social cohesion, they tended to fair better during the pandemic as those most in need could be reached.

He learnt by this, that communities where people were more likely to volunteer and spend time with their families, had better connections with their local authorities. It meant organisation could happen more fluently, and people knew who to speak to when in need.

Abrams said there was a problem with how investment was almost entirely concentrated amongst the "golden triangle".

Angela asked Dr Rupert Lewis how R&D in the UK could respond to challenges such as inequality.

Lewis raised how most of the funding in the UK for R&D came from the private sector. Over the past few years there had been increasing collaboration with the public sector; the question now was how to nurture this relationship.

Scientists could interact more with the policy world, Lewis suggested. For crisis such as the crisis on biodiversity, there had not been enough communication with policy makers and the public about the extent of the problem.

Angela asked Lewis if bodies such as ARIA could help with this regard.

Lewis said that very little was still known about ARIA. This Government and the last had suggested different missions upon which private and public collaboration could focus on, which had been helpful for planning.

Retaining superpower status

Angela asked Professor Susan Gourvenec, chair in emerging technologies at the Royal Academy of Engineering, what she believed had to happen now, for the UK to keep its superpower status.

Gourvenec said it was important for people to have the necessary funding and that the work itself was funded well enough to keep academics in the field.

Angela asked for some examples of British developments which should be celebrated.

Gourvenec said the UK had a very strong track record in digital. It also had immense potential to support decarbonisation and climate change.

Chi Onwurah

Angela asked Chi Onwurah, shadow minister for business, energy and industrial strategy, about a 2019 manifesto commitment to spend 3 percent of GDP on Research and Development, and whether she still stood by it.

Onwurah said three percent was still Labour's target. The UK had to build back from Covid in a way that was green and a way that was fair, and science had to be at the heart of this challenge.

Science and engineering were the twin engines for progress, she said. The three percent would not be public sector spend – it would be achieved by looking at skills; by having regional universities linked into the R&D ecosystem; and by having Government and the private sector working together.

Angela asked if by roping in the private sector, they were being asked to bear the risk.

Onwurah said the private sector was not being roped in as they already worked in it. It was about creating a multiplier effect with thanks to the partnership.

Q&A

A member of the audience asked whether the cut in ODA funding had impacted research on the likes of vaccine development for other infectious diseases.

Ghani said the cuts had hit much of the work her colleagues focused on in infectious diseases in other countries. This research was important as this could be where the next threat emerged. Sustained funding was necessary so that researchers could have stability instead of always focusing on short term grants, which took a huge amount of time; more funding would give academics more space to focus on their work.

A member of the audience asked how public stewardship of publicly funded investments could be looked at. Onwurah said it had to be seen that public stewardship was working towards a public good.