

UK ELECTION 2015

The Labour Party answers questions from *Nature*

Responses from Liam Byrne, shadow minister for universities, science and skills

How would your party ensure that UK science maintains its current position in the world?

Britain's science base is under threat. University finances are at risk from a bankrupt student-loan system. The Conservative's reckless plans to take public spending back to the 1930s will cripple the nation's science and skills budgets. We're being cut off from global science partners as this government damages our vital research relationship with the EU [European Union] and turns away the best and the brightest international students.

Labour's priorities couldn't be more different. We'll fix university finances, introduce a long-term R&D funding framework and invest in gold-standard vocational training to get more young men and women into STEM [science, technology, engineering and mathematics] subjects. A Labour government will also take international students out the net migration target.

Unlike the Conservatives, we also won't put our science base at risk through a reckless approach to Europe. The EU enhances our world-leading research capabilities by supporting collaborations with other countries and providing more than £1 billion in research funding in the UK. Labour will secure Britain's place in a reformed European Union, not jeopardize vital research relationships.

How do you view the state of UK science compared with five years ago?

Over the past five years this government has squandered the legacy left by the last Labour government. Their ad hoc approach to the science budget — with cuts to science capital followed by unplanned top-ups — has created huge uncertainty. Decisions have reflected minister's discretionary choices, not a bigger blueprint for sustained investment.

R&D spending has fallen by over £1 billion in real terms since this government took office. In 2012 the UK, for the first time in 20 years, shrank the share of GDP spent on R&D from public and private sources. Private-sector R&D investment has also fallen behind our key international competitors and the government is failing to lead by example as Whitehall departments have slashed research spending.

Great science requires great scientists from all over the world. But the government's disastrous net migration target has put our research base at risk by turning away top talent. Last year, we saw the number of fee-paying international students at our universities fall for the first time for 29 years — despite previous years seeing double-digit growth. Entrants to UK universities from India and Pakistan have halved since 2010. A Labour government if elected in May would be different, and would make sure Britain's doors are open to the experience and value that international students can bring.

Will your party be making any commitment to the science budget, either to ring-fence it, or to increase or decrease funding?

Our long-term funding framework for science will give Britain's businesses and research base the stability it needs. We'll build on the last Labour's government's successful ten-year approach to science and the framework will also cover spending on innovation and applied research. The strategy will signal our priorities for science and innovation — supporting Britain to take advantage of new technological developments in a digital age and to tackle the major challenges of the twenty-first century such as climate change and an ageing society.

Is government-controlled science spending going to the right areas? Where would you change it?

The accumulation of scientific knowledge is a public good in and of itself, but support for science and innovation is also crucial to building an economy that works for working people. It's therefore right to support a balance between blue-skies and applied research, and a Labour government would continue to adhere to the Haldane principle when it comes to research funding. The role of governments should be to set the conditions for scientific success and encourage companies to invest, while public money funds the exploratory research that markets can't justify and the risky ideas that the market won't pay for.

How should infrastructure funding (that is, capital spending) for science be allocated?

Today, Britain's weak investment and productivity levels compared to our competitor

countries are made worse by a lack of long-term planning for research and infrastructure. Over the last five years, this government has too often made big announcements of capital projects for research without putting the money in place to ensure that the projects are running properly. This means welcome new science kit arrives with 'batteries not included'. In contrast, Labour's long-term framework would deliver a joined-up plan for investment in science.

How high would policies on science and research come in your priorities in the scenario of negotiating any post-election coalition agreement?

A world-class system of education and a secure science base are vital to building the higher-skill, higher-wage economy that supports rising living standards and helps to bring down the deficit. To make that a reality we need nothing less than a majority Labour government, not another five years of the Tories who have put our science base at risk. Only then will we have a government that will take the right decisions to fix university finances, stop turning away international students and secure our vital research relationships within the EU.

Would you want to change visa rules for international scientists and students?

International students should be one of our most dynamic drivers of growth, one of our most important exports, and cause for celebration for the success they bring to the UK. But because of the short-sighted, regressive immigration policies and rhetoric of this government, our share of the global market is falling. Labour believes we should want more fee-paying international students in the UK and so we will ensure international students and academics are made to feel welcome again by taking students out of the net migration target.

Does your party support research on genetically modified (GM) crops, and the cultivation of such crops?

GM can make an important contribution to tackling the challenge of global food security. It is right the EU member states decide themselves whether they wish to use genetically modified crops. The safety of people and the environment should be the government's top

priority — any decision needs to be based on scientific evidence on a case-by-case basis.

Does your party support research on embryonic and adult stem cells? Are there areas of this work that you feel should be off limits?

I believe that stem-cell research should be supported within a proper, evidence-based framework. I also voted to approve the Human Fertilisation and Embryology [Authority's] regulations covering mitochondrial donation when the government brought forward the proposals in February this year. It is vital that debates on this matter are led by the science while also paying careful attention to the sensitive issues involved.

What is your party's position on climate change and the measures needed to combat it?

Under the last Labour government, Britain was the first country in the world to enshrine a long-term emissions target into law, inspiring

action in other countries around the world. Britain must lead by example again. That's why the next Labour government will set a decarbonization target for the power sector for 2030, unshackle the Green Investment Bank and reverse the decline in investment in clean energy we have seen under David Cameron

What is your view of the future energy needs of the UK, and the balance of fossil fuel, nuclear and renewable energy?

Labour is committed to the 2008 Climate Change Act — introduced when we were in government — which will steadily reduce our emissions. In the next government our decarbonization target for the electricity supply will ensure that Britain relies less on unabated fossil fuels and more on renewable sources.

What is your position on university tuition fees? Should they be allowed to rise, be capped or be cut, and how will you account for any resulting changes to university income?

Labour will cut tuition fees from £9,000 to

£6,000 from September 2016 — benefiting students who began their studies last year — and increase grants by £400, helping students from families earning up to £42,000, a move that will benefit over half of students. Because new loans will become more affordable for students, more loans will be repaid. The result is that national debt will fall by an incredible £40 billion by 2030–31, with over £10 billion saved in the next Parliament.

We will fully fund these plans by changes to pension tax relief and continuing the government's policy of limiting tax-free pension pots. And to make the repayments system fairer we will raise £200 million more by asking the richest future graduates to pay 1% more interest on their student loans.

Together these changes will help us deliver a system that is sustainable, affordable and ambitious. ■

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