

Spending Review 2021: Science, Innovation and Skills – a smart investment for Britain

The value of the scientific expertise, innovation, and the wide range of skills developed in Britain's universities has been showcased like never before in the last 18 months.

Ground-breaking vaccines and treatments developed at pace have been the cornerstone of the Government's roadmap out of lockdown and provided protection against future outbreaks. Experts who have been trained at our world-leading universities have become key advisers to governments in all four nations, helping to steer them through the pandemic.

Now, as Government considers how to deal with the challenges of revitalising the UK economy, delivering on its green ambitions and balancing the books, it must find smart investments that will create jobs and boost opportunity in every town and region across the country.

We will deliver maximum value for every pound of public money

The Government has rightly identified the UK's R&D strengths as a good investment and a major competitive advantage internationally – promising to increase its spending on science to £22 billion per year by 2024/25.

In a challenging economic climate, this is a welcome recognition that the country's future will depend more than ever on ideas and talent to deliver sustainable growth. As a sector focused on delivering world-class research and innovation for the country, we recognise it is our responsibility to help Government extract maximum value for every pound.

To achieve this, we recommend Government:

- **Build the investment needed to reach its £22bn target commitment in an even and consistent way, cumulatively adding £2.37bn extra to the baseline research and innovation budget in each year between 2022/23 and 2024/25.** This will leverage significantly more private investment and faster – every pound of public investment in R&D stimulates between £1.96 and £2.34 of private money.
- **Increase Quality-Related (QR) research funding and equivalent streams in the devolved nations by 20%.** This low-bureaucracy, agile funding stream is used by the best universities to commit to longer term challenges or deal with new and emerging issues. For example, the Oxford AstraZeneca vaccine was built on the back of long-term pandemic research started in 2005 when the University used QR funding to help establish the Jenner Institute after identifying pandemics as a future threat.
- **Guarantee the full funding needed for the UK's participation in Horizon Europe for the duration of the programme underlining Britain's reputation as a global actor.**
- **Deliver against the long-standing commitments to fund public grants for research at a minimum of 80% of full economic costs (FEC)** and ensure core funding for Research Councils is uplifted accordingly whilst reducing regulatory burdens and bureaucracy that hamper universities. Without this, key Government targets such as boosting Britain's R&D workforce by 150,000 will be at risk because there are significant shortfalls in funding for postgraduate research training.

University of Birmingham • University of Bristol • University of Cambridge • Cardiff University • Durham University
University of Edinburgh • University of Exeter • University of Glasgow • Imperial College London • King's College London
University of Leeds • University of Liverpool • London School of Economics and Political Science
University of Manchester • Newcastle University • University of Nottingham • University of Oxford
Queen Mary University of London • Queen's University Belfast • University of Sheffield • University of Southampton
University College London • University of Warwick • University of York

As a package, we estimate the funding required to deliver these proposals is less than half the additional investment already pledged by Government to make the UK a ‘science superpower’. This means the remainder can be invested in other R&D and innovation priorities such as ARIA, the National Institute for Health Research and emerging cross-Government challenges.

We will create high value opportunities through innovation

Russell Group universities are represented in every region and country of the UK. As hubs for innovation that deliver highly-skilled graduates and turn ideas into real world impacts, they are magnets for investment. This creates high-value jobs, new homes and vital infrastructure in towns and communities across the country.

To maximise the impact of that work, we propose a three-point plan to nurture and scale up new or existing clusters of innovation, revitalising regional economies, drawing in more private investment, and creating more jobs.

To achieve this, we recommend Government:

- **Scale up existing innovation schemes such as the Higher Education Innovation Fund and the UK Research Partnership Investment Fund with a track-record of proven returns.** Under our proposals a net increase of just under £600m over the three years to 2024/25, can deliver a return of £2.7bn to the UK’s economy and society.
- **Introduce a new deep-tech university seed fund, with a one-off investment of £200m, targeted at innovative ideas within the Innovation Strategy’s seven priority technology families.** This would develop genuinely disruptive technologies, transforming regional economies and creating export revenue.
- **Reform VAT rules and eligibility for R&D-related tax credits to encourage increased collaboration between business and universities** that will leverage further private R&D investment to anchor critical research in the UK, reduce red tape, and ensure more SMEs can benefit from the expertise of the sector.

We will strengthen the pipeline for high-level skills right across the country

A high-quality education delivers for the individual *and* for Britain: a single cohort of UK-domiciled students at Russell Group universities is estimated to contribute more than £20bn to the economy over the course of their working lives.

The UK must build on the strength of this asset by improving access to high-value degrees and maintaining their quality alongside investment in higher level technical skills to create the pipeline of skilled workers needed by employers.

To achieve this, we recommend Government:

- **Guarantee teaching grants on a *per student* basis for the duration of this Spending Review at levels that at least match existing funding.** Since 2018 we estimate the value of tuition fees and Government teaching grant has fallen by 7.1% because of inflation and increases in student numbers. If that trend continues, it risks not only the high-quality education provided by Russell Group universities but undermines the pipeline of high-skilled recruits needed by employers.
- **Deliver a multi-year commitment for the Turing Scheme which is helping students across the UK gain new experiences and learn new skills to help them succeed in life.** In its first year, almost half of the places went to students from disadvantaged backgrounds.

Investment in science, innovation and high-quality teaching and learning provided Britain with the resilience to respond to the global threat of Covid-19. Our proposals will protect and ensure that resilience for the future. They will also ensure every country and region of the UK has the opportunity to succeed and the skills required to respond to longer-term challenges and opportunities such as net zero, the ageing population and disruptive new technologies such as AI as they become commonplace.

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