

## Backing new discoveries and innovations to boost growth

*The world-leading research at Russell Group universities offers a proven route to economic security in an uncertain world. Through their R&D and innovation, our universities helped beat the pandemic and we are ready to work with Government on the new discovery research and ideas the UK needs to build our economy and support hard-pressed families.*

*Delivering on the ambitious science investment outlined in the 2021 Spending Review will leverage billions of pounds of private funding into UK R&D and the wider economy. Looking ahead to the next Parliament, we should be even more ambitious, aiming to invest at least 3% of GDP in R&D as other major research economies do. This should include backing the low bureaucracy, quality-related funding that was key to the development of the Oxford AstraZeneca vaccine.*

*To secure the UK's strategic advantage internationally, we must be able to collaborate with the best minds around the world. Urgent action to deliver association to the Horizon Europe programme and the benefits it provides should remain a top priority. However, we must develop a Plan B which sends a strong signal to the global research community and boosts international partnerships, innovation and discovery research.*

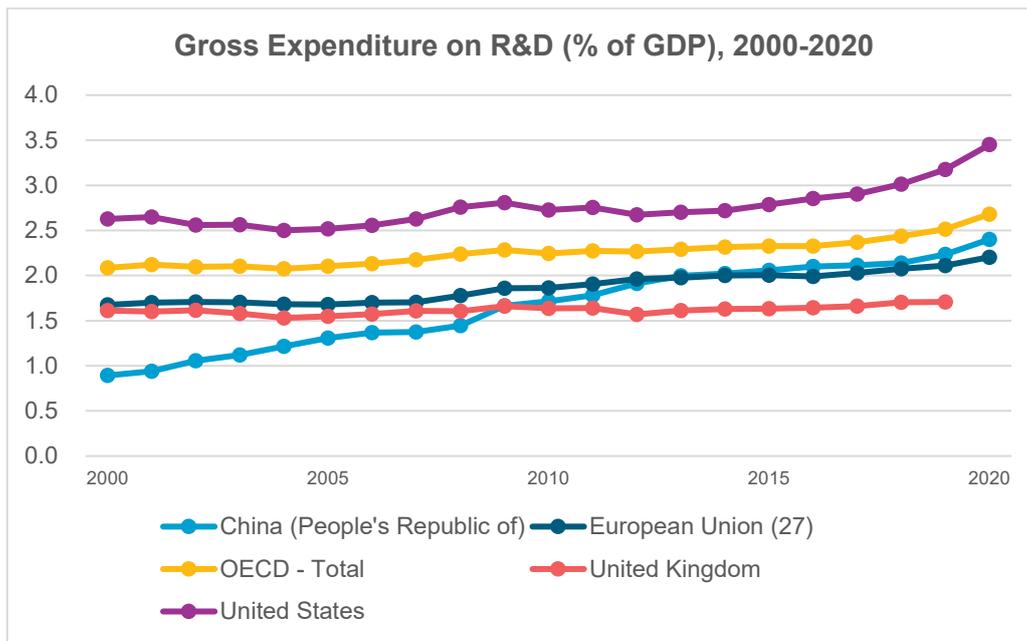
### The value of research and development (R&D) spending

We warmly welcomed the Government's commitment to increase public investment in R&D to £20bn per year by 2024/25. **Delivering on this ambitious commitment will leverage billions of pounds of private investment into UK R&D and the wider economy.** Since every £1 of public R&D investment leverages around £2 of private spending, this means business investment in R&D will rise to almost £40bn by the end of this parliament.

The resulting benefits will be wide-ranging including:

- Enabling universities, businesses and others to support the UK's economy and society, and spark prosperity in towns and cities across the country.
- Building the capacity of the UK's world-class research base and better equipping it to address global challenges such as the transition to net zero and public health.
- A proven return on investment: for every £1 of public research funding, Russell Group universities deliver an average return of £9 to the UK economy.

The Government's commitment to increase R&D spending to 2.4% of GDP by 2027/28 and the UK's ability to punch above its weight on science will mean we are on the right track to be internationally competitive. However, our overseas competitors are increasing their investment further. The US recently proposed the largest-ever increase in non-defence R&D spending. China's spending reached a record high 2.4% and it is targeting annual increases of 7% or more in each of the next five years.



Our country’s future will depend more than ever on ideas and talent to deliver sustainable growth. Research and more importantly harnessing that to deliver real world impacts is one of the UK’s biggest strengths.

**Looking ahead to the next Parliament, we encourage the Government to set a target to boost R&D investment to at least 3% of GDP, as other nations have done.** This would send a clear message that the UK is open for business and ready to embrace the opportunities of a changing world. It would further revitalise our economy, deliver crucial productivity gains and improve prosperity for all our citizens.

### Supporting ground-breaking discovery research

One of Britain’s greatest strengths is its discovery research. Quality-related (QR) research funding plays a key role in improving the UK’s R&D capability, allowing research organisations the flexibility to pivot to address short-term challenges and opportunities, as well as make strategic investments to position the UK as a world-leader in priority areas in the long-term.

Innovations and discoveries supported by QR funding include fusion science, graphene, genomics, opto-electronics, cosmology research, and new tests and treatments for everything from bowel disease to diabetes, dementia and cancer. Indeed, decades worth of QR investment in the University of Oxford’s Jenner Institute enabled the rapid development of the Oxford-AstraZeneca vaccine which has saved an estimated million lives and facilitated the UK’s exit from lockdown.

The strength and depth of our research sector means the UK excels in a range of fields including social science and humanities as well as the STEM disciplines. Innovations in these fields will drive Britain’s success in growth areas like the creative and service industries. By bringing together and applying discovery research in science, technology, design and social science thinking, universities can tackle grand challenges from all angles including moving to net zero, preparing for future pandemics, and dealing with the problems of an ageing society.

UK universities are producing more world-leading research than ever: at Russell Group universities, 91% of all research submitted to the 2022 REF was rated world-leading or internationally excellent. It is this cutting-edge discovery research that holds the key to tomorrow’s pressing economic, health and social challenges. Non-governmental funders often find fundamental, blue skies research too early-stage or risky to support, making the Government’s role not just vital, but irreplaceable.

**As the Government considers its longer term strategy on science and research, it should prioritise low bureaucracy, agile QR funding (and its equivalents in the devolved nations), which is crucial to support scientific breakthroughs, boost the talent pipeline and power future economic growth and productivity.**

### **Maintaining UK leadership in global R&D collaboration**

To deliver world-leading research and innovation and secure the UK's strategic advantage internationally, we must be able to collaborate with the best minds around the world. **The Government's determination to secure association to Horizon Europe has been welcome. Urgent action to deliver association and the benefits it provides should remain a top priority:**

- Horizon Europe is the world's largest ever programme for collaborative R&D. Association will provide access to unprecedented opportunities for cross-border collaboration as well as a scale and breadth of funding and talent flow that will bring multiple benefits to Britain.
- It will help facilitate deeper links not just with Europe – it will also act as a springboard to partnerships with universities and businesses in other countries such as the USA, South Korea and Canada as well as developing nations.
- Horizon Europe allows the UK to continue to benefit from significant investment through the European Research Council (ERC), which funds only the highest-quality discovery research. The UK won more than 1,800 ERC grants under Horizon 2020 – more than were awarded to the whole of France.

**In the event association cannot be secured, it is right the Government has set out alternative proposals to deliver a bold, ambitious global research and innovation programme.** This should be properly funded, drawing on the full £6.8bn committed for this purpose at the Spending Review 2021, and with a longer-term commitment to continue funding after 2024/25 covering discovery research, international partnerships and innovation.