

Rt Hon Sajid Javid MP
Chancellor of the Exchequer
HM Treasury
1 Horse Guards Road
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26 July 2019

Dear Chancellor,

We write as the Presidents of the UK's four National Academies to congratulate you on your appointment as Chancellor of the Exchequer and to offer our support to you in your post.

On Wednesday, the Prime Minister set out a vision for the UK articulating how research, science and innovation are central to its future prosperity. Our ability to create, share and translate knowledge into the development of new products, services and approaches is one of the strengths of the UK economy. It is therefore vital that we build on this by creating an environment, and providing the necessary investment, for research and innovation to thrive. If we get this right, it will be a major step in improving the health and wealth of the nation.

As you know, the UK's National Academies and our Fellowships represent over 5,000 of the world's most distinguished researchers across a broad range of disciplines in academia, industry, charities and the public sector. We work together to support researchers, industry and policymakers to make the UK the location of choice for world class research, development and innovation. We stand ready to support the Government with independent expert advice across a range of areas, including securing the future competitiveness of the UK in research and innovation.

The UK is a research powerhouse: in 2018, 14% of the world's most highly cited papers were produced by UK-based authors and many of the technologies and insights that define our modern society, from genome sequencing to the internet, have their origins in fundamental research conducted in the UK. Furthermore, you will know that the service sector makes up 80% of our economy – our strength in Humanities and Social Sciences plays a vital role in delivering the skills, research and knowledge base on which these areas of our economy critically depend.

However, despite this strength, the UK has historically underinvested in R&D. Last year, we invested just 1.7% of our national wealth in R&D, far below most other leading scientific nations and lower than the OECD average. The excellence of our research and innovation base and our global competitiveness simply cannot be sustained unless we show a similar level of financial commitment to other strong research nations.

That is why we were delighted to see commitments in the Conservative Party manifesto to increase investment in R&D to 2.4% by 2027 and to 3% in the long term. The National Academies have enjoyed working proactively with your department and meeting with your predecessor to discuss how to turn this ambitious goal into a reality. It is vital that the Government continues to honour this pledge and delivers the transformative public investment that will be required to meet it.

Public investment in research and innovation delivers tangible returns to the UK economy. For example, we know that every £1 invested in medical research delivers a return equivalent to around 25p every year, forever. Research and innovation will also be central to addressing

problems with the UK's productivity, and has the potential to offer greater prosperity and opportunity right across the country. Investment in innovation was responsible for an estimated two-thirds of the UK's private-sector labour productivity growth between 2000 and 2007.

Of course, increasing investment in R&D to 2.4% of GDP will not be achieved by public investment alone. Businesses will have to do their bit if this target is to be met. Here too, there is a key role for Government in providing the right environment to stimulate private investment in R&D. Government figures indicate that, on average, every public pound spent on R&D generates an additional £1.36 of private spending. Our world-class universities and research institutions are regularly cited as decisive factors in persuading businesses, large and small, to locate their research and development in the UK. It is therefore essential that we nurture these national assets.

Finally, this target needs the UK to think globally. We must ensure that the UK remains an internationally competitive place to conduct research and to innovate. In doing so, we must seek to build new relationships as well as sustain our existing productive collaborations that have been nurtured over many decades. Therefore, as a starting point, we must seek the closest achievable association to Horizon Europe, the successor to the EU's current research and innovation programme, Horizon 2020. It is vital that the funds to achieve this association are made available at the earliest opportunity to provide much-needed reassurance to the research and innovation community.

As Chancellor, you have the power to provide the investment that will drive the UK's ability to reach these targets and ultimately to deliver benefits to the UK's economy and its people. Building on our existing productive working relationship with the Treasury, we would like to meet with you to discuss our work in more detail, and how we can work together to further unleash the UK's world-leading research and innovation.

Yours sincerely,



Professor Sir David Cannadine FBA
President, British Academy



Professor Dame Ann Dowling OM DBE FEng FRS
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Professor Sir Robert Lechler PMedSci
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