



## Priorities for the 2019 Spending Round

---

Wellcome Trust, 27 August 2019

**Recommendation: Government should pick up the pace on R&D investment by immediately committing to a stronger, sustained and smooth investment schedule.**

Without a significant change of pace on R&D investment, the Government's ambitions for a new era of UK research risk becoming yet another false start. Long-term commitment is needed, which itself requires a long-term mandate from the public. Government and the research community should work together to set out a clear vision for what greater investment could deliver for people across the UK. This should translate the numerical input target into ambitions for R&D at a local, national and international level, and highlight how fresh investment could support the many emerging research strengths that we see across the system.

Backed by this mandate, Government should commit to a year-on-year investment schedule extending to 2027 at the minimum. This will generate confidence among globally-mobile research investors and lessen the "adjustment inefficiencies" known to result from rapid increases in research budgets.<sup>1</sup> Lessons may be drawn from the recent implementation of a 10-year plan in Germany to substantially, but steadily, raise research budgets.<sup>2</sup>

**Recommendation: Government should include the costs of association to Horizon Europe in its financial planning for 2020/21.**

Association to Horizon Europe, the next EU research programme, is necessary for the continuity of the UK's research partnerships. Securing this must continue to be a priority for Government, and the necessary funding should be included in financial planning for 2020/21. It would take considerable time and money to develop a domestic replacement with the same prestige, recognition and ambition, and the UK research system cannot afford to lose momentum.

**Recommendation: The shortfall in Quality-Related research funding should be corrected to support greater creativity and resilience within universities.**

While the Government's ambitions for research have been rising, the budget for Quality-Related (QR) research funding has fallen by 12.8% in real terms since 2010, and extra funding for 2019/20 has done little to offset this decline.<sup>3,4</sup> The full shortfall should be corrected to unlock the full potential of QR funding. QR drives creativity and resilience in universities by uniquely combining flexibility and stability, and we have published evidence of the many benefits which stem from devolving decision-making power to those at the front-line.<sup>5</sup>

**Recommendation: Official Development Assistance (ODA) should continue to support UK-based researchers as part of a combined approach to tackle global health challenges.**

Through the Global Challenges Research Fund, ODA investment has allowed UK-based researchers to contribute their expertise towards solving global health challenges. This has led

---

<sup>1</sup> <https://ideas.repec.org/p/cep/cepdps/dp0931.html>

<sup>2</sup> <https://www.sciencemag.org/news/2019/05/german-research-promised-decade-budget-increases>

<sup>3</sup> <https://publications.parliament.uk/pa/ld201719/ldselect/ldsctech/409/409.pdf>

<sup>4</sup> <https://www.ukri.org/news/university-research-to-receive-major-funding-boost/>

<sup>5</sup> <https://wellcome.ac.uk/sites/default/files/empowering-uk-universities-how-strategic-institutional-support-helps-research-thrive.pdf>

to real impacts, including the development of the world's first vaccine for Ebola which is being used in the ongoing outbreak in the Democratic Republic of the Congo.

Research is a powerful tool for tackling global health challenges when combined with coordinated investment in infrastructure, education and other enablers of development and prosperity. The UK has rapidly expanded the role of research in the ODA budget, reaching 8.3% in 2017. The UK now invests far more ODA into research than any other donor nation – this experiment should continue alongside a rigorous and transparent evaluation against ODA objectives, to build the evidence-base on the most effective balance of investment.

**Recommendation: Government should carry out a transparent prioritisation process for the opportunities identified in the upcoming infrastructure roadmap, followed by a swift and flexible approval process to keep UK research capabilities at the cutting-edge.**

UKRI is expected to publish the UK's first national research and innovation infrastructure roadmap this autumn. We welcome this long-term commitment to research facilities and urge UKRI to rapidly develop a transparent process to prioritise the capital investments identified in the roadmap.

This should be accompanied by a clear and streamlined approval process which is flexible enough to accommodate the specific circumstances of individual capital investments. Investment must be deployed swiftly if the UK is to protect and enhance its research facilities and the competitive advantage they provide.

Among other opportunities, we urge Government to consider the capital and operational funding required to deliver the full potential of facilities including:

- The Diamond facility, and the proposed **Diamond II upgrade**.
- Operational costs for the **Biological Cryo-Imaging** (eBIC) and **Free-Electron Laser** (X-FEL) hubs, which have proven highly successful at leveraging industry investment.
- Operational costs for the new **Alan Turing Institute** and **Rosalind Franklin Institute**.

**Recommendation: Government should roll out a funded requirement that schools entitle all teachers to 35 hours of predominantly subject-specific Continuous Professional Development per year.**

Great teachers are key to a strong STEM workforce, and high-quality Continuous Professional Development (CPD) is known to deliver sustained improvements in teaching quality, pupil outcomes, and teacher retention and recruitment. Our ongoing CPD Challenge trial involves 40 schools in South Yorkshire aiming to provide at least 35 hours of evidence-based CPD annually to all their teachers, delivered either in-house or by external providers.

We want Government to roll out a funded requirement that schools entitle all teachers to 35 hours of predominantly subject-specific CPD each year. Based on 2017 data, we estimate that £461 million per annum would be required to expand subject-specific CPD provision and provide teaching cover for the ~74% of mid-career teachers who are underserved by existing Government-funded programmes.

Building towards this ambitious goal, Government might consider initially prioritising a fully-trained CPD Champion in each school to coordinate CPD and champion the benefits it can deliver to teachers and pupils. Our CPD Challenge has already demonstrated the importance of such a role in schools to support the uptake of CPD. In England, this would carry an estimated cost of £35 million over 3 years, with long-term costs likely to fall as the programme delivers a legacy of trained Champions within the teaching workforce.