Cancer Research UK’s response to the House of Commons Select Committee on Science and Technology: Inquiry into Science Budget and Industrial Strategy

October 2017

Cancer Research UK (CRUK) welcomes the opportunity to respond to this inquiry. Our response reiterates messages from our autumn budget submission. We highlight the importance of making a strong commitment to a life sciences sector deal following the publication of the Life Sciences Industrial Strategy. We also comment on the distribution of funding to support research and innovation, including the importance of the dual support system.

Key messages:

• The Government should take forward recommendations in the Life Sciences Industrial Strategy, agreeing an ambitious sector deal that will build on our status as a global leader in the life sciences. In particular, Government should:
  o Prioritise supporting the early detection initiative as part of the establishment of the Health Advanced Research Programme.
  o Commit to increase the charity-support element of quality-related (QR) funding, the Charity Research Support Fund (CRSF) in England, in line with inflation to reach £264 million by 2020/21.

• We welcome Government’s focus on science and research in the Industrial Strategy, including additional investment in research and development.
  o To support the ‘balanced funding principle’ a proportion of Government’s new investment in science should support QR research in UK universities to maximise the impact of this investment by attracting charity and industry investment in UK research.
  o Government should clarify the allocation of existing science funding commitments and set out a clear roadmap to achieve ambitions to increase the proportion of GDP spend on science to 3%.

The coherence and links between the Industrial Strategy Challenge Fund and the ‘sector deals’

1. Alongside investing in science, research and innovation, ‘cultivating world-leading sectors’ was a key pillar of the Government’s Industrial Strategy Green Paper. The life sciences was rightly highlighted as a sector where specific action could be taken to further build on our excellent reputation.

2. We support the recently published Life Sciences Industrial Strategy and its ambition to enhance and grow the UK life sciences sector. As the strategy makes clear, a thriving life sciences sector not only benefits the UK economy but will also improve patient outcomes and NHS sustainability. It is imperative that the Government agrees an ambitious sector deal to support implementation of the strategy.

3. Further clarity around the funding of the sector deal is required. This includes the interplay between funding made through the Industrial Strategy Challenge Fund and other routes. CRUK and other organisations who will share responsibility for implementing parts of the strategy should be involved in the agreement of the Sector Deal.

4. There are a number of key recommendations that we would like to see Government take forward as a priority:
a. The Health Advanced Research Programme (HARP). Within this we are particularly supportive of the proposal to create a platform for early detection of disease.

b. Charity Research Support Fund (CRSF): We support the recommendation to reinforce the UK science offer by enhancing the CRSF – this could be achieved within the existing commitment to increased investment in R&D.

The Health Advanced Research Programme (HARP)

5. The flagship recommendation of the strategy is to create HARP, where charities, industry, NHS and Government collaborate to fund higher risk “moonshot” projects. We strongly support the establishment of this initiative.

6. It is encouraging that charities are identified as being central to HARP. It is also acknowledged that success and scale is heavily dependent on involvement of the data-rich NHS, as well as Government committing resource to help coordinate and implement HARP. However, in taking HARP forward, we would strongly advise that it is created as a multi-funder independent initiative, as alluded in the LSIS.

7. A number of example projects that would sit under the HARP have been identified as having the potential to transform healthcare over the next 20 years. We are particularly supportive of the inclusion of the project to create a platform for the early detection of disease. CRUK put this proposal forward during the development of the strategy. This platform would allow multi-technology evaluation of early phase diagnostics and would expand on successful UK cohort collections of biological materials that help us understand why some people develop certain diseases, such as the UK BioBank.

8. A revolution in early detection research would dramatically improve the chances of survival for cancer patients, create a more sustainable health system and set the UK apart from international competitors. This would seed a new diagnostics industry which has the potential to be world-leading.

9. We are also supportive of the other suggested projects, including the genomics in medicine project which supports the Chief Medical Officer’s “Generation Genome” visioniii. This includes a key objective in the NHS for routine whole genome sequencing of cancer samples that could have major implications for precision medicines research.

10. Government should commit to supporting the establishment of HARP as a multi-funder independent initiative with a particular emphasis on taking forward the project focussed on early detection of disease.

Increasing the Charity Research Support Fund (CRSF)

11. In particular, we support the recommendation to enhance the Charity Research Support Fund (CRSF). This is a recommendation we championed with other medical research charities during the development of the strategy.

12. Government must provide universities with long-term confidence in its support for charity investment by committing to increase the CRSF. This commitment needs to be taken on by the Higher Education Funding Council’s successor organisation, Research England.
13. Universities rely heavily on funding from charities for exploratory and high-risk research. Promising results which arise from this research are taken forward by industry, having been “de-risked” by charity funders. To leverage further investment from industry and charities, it is crucial that a proportion of Government’s new investment in R&D of up to £2bn/year supports research in UK universities through quality-related (QR) research funding, which underpins the excellence of our science base.

14. The CRSF is an important component of QR research funding. Universities receive the CRSF from Government to cover indirect costs of research, such as the costs of maintenance of laboratories, which charities cannot pay because their supporters expect donations to be spent directly on research activity. However, ongoing failure to increase investment in CRSF, so that it keeps pace with charity spending, is impacting on the attractiveness to universities of medical research charity funding, with negative consequences for research anticipated in a wide variety of disease areas.

15. Within QR funding, the level of the CRSF has remained at £198 million per year since 2010; a real-terms decrease of £38.7 million over 6 years, and it will stay at £198 million in 2017/18. This has put pressure on universities and has led to some coming to view charity funding as being less valuable than other sources. An increase in the CRSF to £264 million by 20/21 would be in line with inflation since 2010 and in proportion to changes in charity investment since 2010.

16. Evidence suggests investment in charity research by Government will see long term returns: each pound invested in cancer related research by the taxpayer and charities returns around 27 pence to the UK year on year. It is therefore vital that the Government incentivises and provides long-term confidence for universities seeking charity investment.

17. **Government should commit to increasing the CRSF each year in line with inflation and in response to changes in charity investment.**

The rationale and coherence for the distribution of funding

18. We welcome Government’s intention to strengthen the global standing of UK research and its commitment to increase the science budget by £2 billion a year by 2020. We would welcome further clarity on how this funding will be allocated.

19. Increased investment in innovation is very welcome. However, it’s also vital that a proportion of this investment supports underpinning QR research funding in UK universities. QR funding is a crucial component of the dual funding system, sustaining the excellence of our science base. This science base is crucial to enhance the UK’s innovation landscape and support the commercialisation of research.

20. The ‘balanced funding principle’ is enshrined in law in the Higher Education and Research Act. The principle exists to safeguard a reasonable balance of funding between response-mode funding of research councils and funding where Research England will have responsibility, like QR funding. As the research councils and Research England are brought together under UKRI, this presents an opportunity to look at this funding balance to ensure the principle is maintained. This should safeguard underpinning research.
21. By investing in science through the dual support system, Government leverages additional investment from charities and industry, generating further scientific and economic growth. For every £1 spent by the Government on R&D, private sector R&D output rises by 20p per year in perpetuityx.

22. To support the 'balanced funding principle', a proportion of Government’s new science investment should support underpinning QR funding, including its charity support element.

23. We also support the vision to increase the proportion of GDP spend on R&D to 3% in the longer term. The UK science funding landscape is complex and includes a number of funding components, including the ISCF for various sectors.

24. For example, in its Five Year Forward View (FYFV) NHS Englandxi stated an intention to improve its ability to undertake research and apply innovation. To achieve this, Government must continue to invest in clinical research infrastructure through the National Institute of Health Research and maintain this budget in real terms. The UK excels in recruiting cancer patients to clinical trials because of this infrastructure, which provides the foundations on which academia and industry can invest.

25. To reach long-term ambitions to increase the proportion of GDP spend on science to 3%, Government should publish a roadmap for how this will be achieved. This roadmap should include measures to effectively market UK science globally and strengthen our researcher collaborations internationally.

26. Government should clarify the allocation of existing science funding commitments and set out a clear roadmap to achieve ambitions to increase the proportion of GDP spend on science to 3%.

About Us

Cancer Research UK is the world’s largest independent cancer charity dedicated to saving lives through research. It supports research into all aspects of cancer and this is achieved through the work of over 4,000 scientists, doctors and nurses. In 2016/17, we spent £432 million on research institutes, hospitals and universities across the UK. We receive no funding from the Government for our research and are dependent on fundraising with the public. Cancer Research UK wants to accelerate progress so that three in four people survive their cancer for 10 years or more by 2034.

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x Life Sciences Industrial Strategy – A report to the Government from the life sciences sector


xiii AMRC 2015 Spending Review submission to HMT


xv http://www.kcl.ac.uk/sspp/policy-institute/publications/SpilloversFINAL.pdf


xiv Section 103, Higher Education and Research Act, 2017: