

31 May 2017

Dear Candidate

I am writing to you on behalf of the Royal Society of Biology to stress that to secure a good future for the UK and its citizens, the **next Parliament must ensure that UK science remains strong**.

The success and potential of science is vital for the UK's development. Science underpins a large part of the economy and is at the heart of maintaining health into old age, having nutritious food for all; and sustainably generating the energy to power our economy and homes. The UK is a global leader in science and some pre-election debates and manifestos have voiced support. There are very many important decisions to be made in the next Parliament and we want MPs to have the evidence to make informed choices, if you are elected I want you to know how we can help.

Despite recent welcome upturn in attention and investment the UK's strength in science remains vulnerable to past underinvestment (by comparison with other nations), and is very vulnerable to any reduction in international collaboration and the capacity for movement of scientists.

If you are re-elected I hope you will:

- ensure the UK has an excellent environment for science – with access to the best people, collaborations, investment, and regulations
- always consider the scientific evidence relevant to decisions

If you are elected, we will contact you after the Election, on behalf of the science community, with an invitation to Parliamentary Links Day in the House of Commons on Tuesday 27 June from 10:00. This year the theme of **Science and Global Opportunities** offers a key engagement opportunity. UK science is global in relevance and draws upon global talent; the potential benefit of preserving these strengths is enormous. Please contact me if you would like to discuss any aspect of our work.

Sincerely



Dr Mark Downs CSci FRSB, Chief Executive

Context

UK science is very successful.

UK science is highly productive and hugely respected internationally - it has continued to leverage inward investment on a lean public funding base. UK science delivers societal returns on R&D investment at twice or three times private returns - we must not risk this economically, socially and diplomatically important area of strength.

UK science is essential.

Science has unique capacities to support improved quality of life and economic growth, it delivers life-saving, problem-solving, business building, revenue generation and brings fulfilling employment and development opportunities, as well as helping us all to appreciate and make sense of the world. We need our vibrant science base to continue to develop cancer therapies, food and farming innovation, mental health initiatives, neonatal care, renewable energy options, waste management, antibiotic resistance strategies, environmental preservation and more, while being ready and able to deal with disease outbreaks and the destructive effects of environmental disasters.



UK science is global.

UK science addresses local and global challenges, it draws upon the work of ambitious scientists from across the world and draws in the pick of international talent to work here or collaborate from abroad. A full picture of the UK science workforce is not available but as an illustration 24% of employees in higher education (HE) institutions are international, the largest group (16%) are from the EU (non-UK). The movement of skilled and talented trainees and experts, for short or indefinite periods is vital for science progress here. The UK successfully wins European funding but we know that many grant holders here are non-national. Researchers are mobile and while talented researchers come to the UK because of the science environment, they often decide to leave because of social factors, and thus the UK's continuing strength depends upon social as much as funding policy. Current uncertainty about immigration status is deeply affecting many scientists.

UK science is facing uncertainty.

We are in a time of extraordinary change across issues that are fundamental to UK science's current success. The reorganisation of the publicly funded research, innovation and education landscape under the Higher Education and Research Bill, and the Brexit process combine to create an unprecedented climate of uncertainty that we must quickly address so that we do not suffer a potentially disastrous loss of ground and direction. The key short term vulnerabilities are around people and funds as well as regulation. Within the science community there is huge focus on the issues facing people who are working in and for UK science. Despite welcome attention to public science funding the UK still underinvests by comparison with EU and OECD averages; in looking ahead we must take into account the potential loss of our current net gain from EU research funds.

The importance of UK bioscience...

<p>83% of Biological Science assessed in the Research Excellence Framework 2014 was judged as world-leading or internationally excellent.</p>		<p>The UK receives over £1bn annually from the EU in competitively-awarded R&D funding.</p>
<p>A quarter of the world's top 100 prescription medicines were discovered and developed in the UK.</p>	<p>Health and biomedical life sciences industry has a turnover of £51bn, employing 176,000 people.</p>	<p>17% of science academics at UK research institutions are from the EU (non-UK).</p>
<p>UK academic bioscience research led to 689 spin-out companies between 2002 and 2014.</p>	<p>The UK's environmental research is world-leading. A 2013 BIS report placed it first globally for research quality.</p>	<p>UK agri-tech sector contributes £10.4bn, and underpins the UK's £25bn food & drink manufacturing sector.</p>
	<p>Public investment encourages private investment and for every £1 spent by the Government on R&D, private sector R&D output rises by 20p per year in perpetuity.</p>	