Parliamentary Links Day 2014 – Science and Public Trust

Catherine Ball (Science Policy Officer)

The biggest science event in the parliamentary calendar certainly lived up to its billing this year; it was standing room only at Parliamentary Links Day. Organized by the Society of Biology on behalf of the whole science and engineering community and supported by a wide range of scientific societies and organizations including the Biochemical Society, this year’s event was held on 24 June 2014 in Portcullis House, Westminster. The theme was Science and Public Trust and the day explored the ways in which the scientific community contributes to the public’s trust in science. The importance of effectively engaging UK citizens with science and policy was emphasized throughout the day.

The day focused around several scientific panel presentations and discussions as well as keynote addresses from Sir Mark Walport, Government Chief Scientific Advisor, Rt Hon Liam Byrne, Shadow Minister for Universities, Science and Skills, and Sir Paul Nurse, President of the Royal Society. In attendance were a number of MPs and Lords as well as representatives from the science and engineering community.

The event began with a welcome from Rt Hon John Bercow MP, Speaker of the House of Commons. Continuing the Parliamentary style, the event was chaired by Andrew Miller MP, Chair of the Commons Science and Technology Select Committee, and the various panel discussions were co-chaired by Dr Julian Huppert MP and Stephen Metcalfe MP.

The two panels were made up of science journalists, academics and scientific organizations. They discussed the need for a stronger engagement with the public on scientific issues, and stressed the value of a strong connection between both parliament and the sciences in all capacities to advance in policy making.

In his keynote address Sir Mark Walport discussed the planned development of a fast stream specifically aimed at Science and Engineering Civil servants in order to bridge the gap for the scientists of the future, as well as the importance of the social sciences in relation to policy issues. He encouraged the room to engage with policy at local and national levels to continue integrating science effectively.

Sir Paul Nurse gave the closing talk which looked at the immediate need to communicate reliable and digestible knowledge about the natural world in order to maintain a general trust in both science and scientists.

The debate at the event and across Twitter addressed topics such as the lack of funding organizations for post-graduate training, increasing productivity, global collaborations, inspiring young minds and most importantly constantly and consistently engaging with the public.
Blue Skies Research

Most laboratory-based scientists will have experienced a serendipitous ‘eureka’ moment at some point during their research. My own came about halfway through my PhD and resulted in an unexpected publication. Many such moments have triggered key scientific discoveries which have led to crucial innovations. Though not in my case unfortunately…

Scientists are often said to be driven by a simple fundamental desire to further the understanding of the complex world around us. This type of curiosity-driven research is commonly referred to as blue skies research. This is not directed by a specific goal, but is purely exploratory and can lead to a variety of interesting and applicable surprise discoveries.

The scientific funding landscape in the UK is currently largely driven by the concept of ‘impact’. Policy impact, societal impact and economic impact are concepts regularly bandied around. The latter is a particular favourite of the Chancellor of the Exchequer, George Osbourne, who has said a number of times that “Science is a personal priority for me.”

There has arguably been a move towards directed impact-driven scientific funding in the UK. Although the benefits of this are clear, many fear that this could squeeze out the potential for serendipitous discoveries. Indeed, two of the areas of translational research highlighted were highlighted in the Chancellor’s last budget derived from such discoveries; graphene and cell therapy.

Funding blue skies research has been likened to playing the lottery. There’s the potential to spend a lot of money with no return; but when there is a return, the rewards can be huge. The classic clichéd example of hitting the ‘jackpot’ of blue skies research is penicillin. Most high school biology students are able to relate the story of Alexander Fleming when he noticed that bacteria weren’t growing in a small halo around some mould which had contaminated one of his samples. When the substance the fungus secreted was isolated, it turned out to be highly toxic to bacteria yet largely harmless to humans. It wasn’t previously known that antibiotics even existed, but penicillin and subsequently developed antimicrobial drugs have saved millions of lives. Would Alexander Fleming have been able to make such a discovery if his research priorities had been purely impact-driven?

Such a question is obviously facetious, but the lack of funding for basic research is a real concern. Of course, translational research is vital but, by its very nature, this cannot occur without the underpinning research to ‘translate’. Funders must be aware of this; indeed this is part of the argument for the maintenance of the Haldane Principle. This states that decisions about what to spend research funds on should be made by researchers rather than politicians.

Arguably, scientists tend to appreciate the importance and relevance of blue skies research more and act to ensure that funding streams are not solely directed towards the Government’s priority areas of research. A number of these have been identified with the aim of furthering economic development and are collectively known as the ‘eight great technologies’. Although they are no doubt vital areas of scientific discovery, they should not be the focus of all Government-funded research.

A varied and multi-faceted (as well as sustained!) scientific funding landscape is surely the best way to ensure that there is a steady stream of ingenious fundamental discoveries to be translated into the technologies and economy-boosters of tomorrow. And there is most certainly a blue sky looming over that landscape.