

An inquiry by the House of Commons Science and Technology Select Committee into Science communication

A reply on behalf of the Royal Society of Biology

29 April 2016

The Royal Society of Biology (RSB) is a single unified voice, representing a diverse membership of individuals, learned societies and other organisations. We are committed to ensuring that we provide Government and other policy makers, including funders of biological education and research, with a distinct point of access to authoritative, independent, and evidence-based opinion, representative of the widest range of bioscience disciplines.

The Society welcomes the House of Commons Science and Technology Select Committee consultation on <u>Science Communication</u>. We are pleased to offer these comments which have been informed by specific input from our members and Member Organisations across the biological disciplines and by previous consideration of associated topics.

Summary:

- Public support for science is a vital component of an environment in which high quality research and innovation can thrive to deliver real public benefit.
- Recognition and understanding of public attitudes among scientists is critical and increasingly examined.
- Engagement and monitoring are necessary for both of these first two issues and Government support of is vital.
- Continually bringing science to new audiences is challenging but important; mainstream media and broadcasters need to be significant allies in this. As with all public engagement activity, good expert involvement is essential and public employers should recognise and reward excellence, to encourage and ensure participation.
- Quality in communicating science should be valued alongside quality in research.
- Encouraging study and career engagement in STEM is essential for the future of UK science; the importance of the skills pipeline cannot be underestimated.
- Government support for engagement and development of good consultation practice is key to ensuring the right advice informs policymaking. Recent updates to the Consultation Principles may have brought some improvement but it is still too early to assess real impact.

Charles Darwin House, 12 Roger Street, London WC1N 2JU. Tel: +44 (0)20 7685 2550 info@rsb.org.uk www.rsb.org.uk

Registered Charity No.277981 Incorporated by Royal Charter



Response

The trends in attitudes to science, and public engagement with science.

- 1. There are now significant bodies of information, in terms of longitudinal studies, on attitudes to science in the UK, and other regions.¹ Awareness of the importance of public engagement has continued to grow within the biosciences; there is now a long history of engagement activities and with this has come increasing experience across the sector. Continuation of survey programmes is essential to track and understand changing attitudes among the public and to develop appropriate responses.²
- 2. The distinctions between communication activities and engagement activities, and ensuring that chosen approaches match to activity objectives, are well established. There is an active professional community as well as an active community of academic and industry researchers involved in public engagement. Evaluation of activity is common and is a requirement of many funding mechanisms. Nevertheless, the need for engagement or for more engagement is regularly raised for individual topics as is the need for more mechanisms to support engagement and recognition for good activity undertaken by academics.
- 3. Bioscience learned societies frequently have charitable objectives to engage the public and to inform public discourse and attitudes. Many organisations have invested in employing communication and engagement professionals and have specific schemes to train, support or recognise and reward good participants and projects (see Appendix 1 for some examples). In addition the *Concordat for engaging the public with research* accumulates reports from its many signatories, including the RSB.³ Access to training in communication and engagement is frequently through such schemes as well as through the STEM Ambassador⁴ programme and others. The RSB is a member of the National Forum for Public Engagement in STEM.⁵
- 4. Frequently, learned society schemes provide training for members. In some cases the provision is broader, aiming to:
 - Provide training opportunities for members to promote, gain or enhance engagement skills
 - Develop materials for members to use in planning, delivery and evaluation of their engagement activities

³ <u>http://www.rcuk.ac.uk/documents/scisoc/concordatforengagingthepublicwithresearch-pdf/</u>

¹ For example, <u>https://www.ipsos-mori.com/researchpublications/researcharchive/3357/Public-Attitudes-to-Science-2014.aspx</u> *inter alia*

² <u>http://www.wellcome.ac.uk/About-us/Publications/Reports/Public-engagement/WTX058859.htm</u> For example, the 2015 Wellcome Trust Monitor indicated an unexpected drop in trust for medical research charities.

http://www.publicengagement.ac.uk/explore-it/what-are-policy-drivers/concordat-engaging-public-with-research ⁴ <u>http://www.stemnet.org.uk/about-us/</u>

⁵ <u>https://www.publicengagement.ac.uk/work-with-us/current-projects/national-forum-public-engagement-stem</u>



- Plan events that provide a platform for members to meet the public; engage in a dialogue to share the excitement of science; and demonstrate relevance to national and global challenges
- Provide funding for members or public engagement professionals to hold events or undertake engagement activity.
- 5. We still hear concern that many academic institutions do not have formal structures for rewarding academic staff involved in public engagement. However engagement plays a part in impact⁶ and this is increasingly reflected.
- 6. The bioscience community is diverse in terms of roles, training, responsibility and experience; ensuring that a range of scientists take part in engagement helps embed understanding and is effective. Technical, academic research, compliance and planning scientists among others can play a part. Equally the public is not homogenous and engagement activities have to consider specific audiences or participating groups.

The balance of effort needed to increase public engagement in science by 'new audiences' and by the 'already interested'.

- 7. Efforts are made by many individuals and organisations in the biosciences to reach *new* audiences and in our experience evaluation of public engagement often pays particular attention to this. Reaching beyond interested groups remains a difficult challenge however.
- 8. Participation in science festivals helps to reach high numbers of people but rarely groups without an existing interest in science. Approaches such as participating in community or music festivals (eg Green Man Festival) and delivering activities in public areas (eg food markets) have been tried with some success. It is possible to reach out via national and local media both to directly communicate information and to encourage new audiences to participate in tailored activities. One barrier to reaching new audiences online is that people often choose to follow on Twitter, Instagram, Facebook etc those in whom they are already interested.
- 9. Bioscientists should try to engage new audiences but training support is vital and finance support may be needed also. The overall objectives of the exercise are important in determining whether *new* or *already interested* audiences are most appropriate. In order to encourage scientists to participate and contribute it should be recognised as part of their work programme, and where appropriate a valued

⁶ Some analysis of REF 2014: <u>https://www.publicengagement.ac.uk/explore-it/what-are-policy-drivers/measuring-impact/ref-</u> 2014



output of their project. This is also true of early career scientists who may lack opportunities or support to engage beyond their academic field. One aspect is the time required for the scientist to concentrate on this work. Typically an academic has to balance teaching with research. It is recognised increasingly that the academic workload is becoming saturated as acquiring grant funds becoming more competitive and ever higher standards of university teaching are required. Thus, unless it is properly resourced public engagement can become a poor third.

10. Citizen science approaches on topics of broad relevance can open up new interactions. The RSB has taken this approach, with partners on topics such as flying ant⁷, spider⁸ and starling⁹ behaviour, and on individual breathing and health symptoms.¹⁰ Creating downloadable phone *apps* can be a useful way of achieving this,¹¹ as can public polls.¹² Technological advances are allowing citizen science to become global in scale and long-term in ambition. <u>Citizen science activities</u> reach thousands of people and offer active participation in research as well as a focus for discussion and communication of not just the topic in question but also the production of knowledge and its governance.

Any further steps needed by the media and broadcasters to improve the quality, accessibility and balance of their science coverage; and science coverage in broadcasters' programme-making.

- 11. Attention should be paid to communicating the importance of and desire for greater diversity within science at all levels of seniority. Good opportunities should be given to early career scientists as well as those who are well established and considered leading experts. Engaging with an increasing diversity of scientists could help reach a wider audience beyond those already participating, as well as enriching communication by drawing on different experience. RSB encourages excellence via its annual awards in communication.¹³
- 12. It is important to take account of online media and the increasingly diverse platforms on which information is now disseminated and in particular the fora in which information is discussed. This is particularly but not exclusively relevant for young audiences. Because 90% of people use the internet

¹² Approximately 8,000 people voted in the RSB 'Favourite UK insect' poll (<u>https://www.rsb.org.uk/get-</u>

⁷ <u>https://www.rsb.org.uk/get-involved/biologyweek/flying-ant-survey</u>

⁸ https://www.rsb.org.uk/get-involved/biology-for-all/spider-app

⁹ https://www.rsb.org.uk/get-involved/biologyweek/starling-survey

¹⁰ https://www.rsb.org.uk/get-involved/biology-for-all/britainbreathing

¹¹ RSB Spider app engaged new audiences and was covered in the popular press (including the Star, Mirror, Daily Mail etc.) as well as the BBC website. It had around 50,000 downloads but long-term outcomes are difficult to assess on an individual basis and could be anything from identifying one spider once to being inspired to begin a career in taxonomy.

involved/biologyweek/favourite-uk-insect-poll) which introduced information on each shortlisted species but did not assess understanding.

¹³ <u>https://www.rsb.org.uk/get-involved/awards-and-competitions/science-communication-awards</u>



to find out more about science and medical research¹⁴ – this opens opportunities for online communication tools and projects, such *as <u>I'm a Scientist</u>*. The internet is an important theatre for discussion of public health messages, and therefore for communicating the huge number of relevant science areas. It is challenging to make available credible and accurate information that is readily discoverable on the web. Many authoritative sources are not well resourced, or able to deploy resources to this task. An example of a well-used and helpful resource is the NHS <u>Behind the Headlines</u> site. Many science organisations are not as well-resourced as campaigning groups that can therefore communicate their message more prominently.

The communications strategies being taken to encourage young people to study STEM subjects in higher and further education, and to encourage those people towards STEM careers.

- 13. Familiarity with science is an increasingly important component of citizenship and becomes essential in managing personal health and participating in public decision-making. ¹⁵Science communication and public engagement activities aim to provide opportunities for people of all ages to explore and discuss the issues raised by developments in molecular bioscience, ranging from new technologies such as synthetic biology to public health challenges such as antimicrobial resistance. Formal science education can act as a barrier to some young people's understanding of the interdisciplinary nature of modern science and engineering. Science communication and public engagement can help to address this issue, for example by focusing on new developments and technologies such as synthetic biology (which draws on biology, chemistry and engineering).
- 14. The pressure on schools to deliver maximum grades means that they are less likely to undertake engagement activities not directly linked to the curriculum. Many societies find it easier to access and engage with schools if the project is limited to curriculum linked activities only, this narrows scope. Curriculum enrichment tends to be focused on students that are either gifted and talented, or have special educational needs, with the remainder often unable to access enrichment activities. The British Ecological Society has found that in order to engage more widely schools must be proactively asked to allow these students the opportunities, this means that ordinarily the majority of students are being excluded from important development options. Therefore, STEM subjects may only be encouraged among a fraction of young people who may be interested.

¹⁴ <u>http://www.wellcome.ac.uk/About-us/Publications/Reports/Public-engagement/WTX058859.htm</u>

¹⁵ "Ensuring that everyone, not only those that go on to pursue science as a career, understands how science produces reliable knowledge, means science will continue to be effective in bringing improvements for humankind." Sir Paul Nurse (2015) <u>https://www.rsb.org.uk/news/14-news/1492-sir-paul-nurse-helps-rsb-celebrate-journal-of-biological-education-50th-birthday</u>



- 15. Societies engage widely with schools both in support of curricular and extracurricular activities. Programmes such as <u>SciberMonkey</u> and <u>Gopher Science Labs</u> provide training as well as encouragement and increasingly popular <u>competitions</u> specifically encourage knowledge development beyond the curriculum.
- 16. In terms of engaging with schools that have active and well-supported science programmes and those with poor and stretched provision, ambassadors and volunteers report to us the importance of engaging with all, and that acting to ensure continued support for programmes can be as effective as initiating new ones.
- 17. Engagement offers an opportunity to reduce the focus on the science output and increase the focus on the scientists and science as a career, again with an emphasis on how is science carried out, what it means to be a scientist, and the range of opportunities there are for scientific careers.¹⁶ In addition the important message that training in STEM is also an excellent training of the mind and in highly transferrable skills. Just as science is an essential part of broader society,¹⁷ STEM trained graduates have the skills and potential to contribute productively and find rewarding careers in all areas of the economy and society. In addition there are non-degree routes to STEM careers.

The extent to which public dialogue and consultation is being effectively used by Government in science and technology areas of policy-making.

- 18. Public dialogue and public consultation are elements of the process of open policymaking developed by the Government as a component of recent civil service reform. Government has used public dialogue programmes strategically on particular topics and has supported programmes such as <u>Sciencewise</u> which during its funded period produced a rich resource of guides and case studies. The contract for Sciencewise recently came to an end and no succession plan is yet in place. An active programme or mechanism for engagement on topics relevant to Government, that involves Government, is important as well as ensuring that findings reach those engaging at grass roots level.
- 19. Public consultation on issues of governance that require decisions are mainly undertaken by individual responsible Government Departments. Following introduction of new Consultation Principles in 2012, to replace previous codes, there was a noticeable change in consultation practice that was examined by the Secondary Legislation Scrutiny Committee and <u>debated</u> in the House of Lords. The RSB had <u>analysed and commented</u> on practice as it related to consultations in the biosciences, and had noted concern about the potential for poor outcomes from <u>consultations of short duration</u>. Reorganisation

¹⁶ <u>https://royalsociety.org/topics-policy/diversity-in-science/parent-carer-scientist/</u>

¹⁷ http://www.britishscienceassociation.org/news/science-not-just-for-scientists-launched-by-the-british-science-association



across Government may have also reduced the time available to policymakers to engage with the community by comparison with the extent probably envisaged when the principles were originally drafted.

- 20. After allowing time for practice to evolve, the issue was again considered by the Committee in relation to specific case studies in 2014. The <u>report of this inquiry</u> notes that: "Information subsequently received from the Cabinet Office states that there were over 300 Government consultations in the first six months of 2014, by contrast with 179 consultations in the first six months of 2012; and that the time spent consulting on a measure dropped from an average of 10.5 weeks in the first half of 2012, to 7.6 weeks in the first half of 2014." The Committee concluded that "much consultation by Departments is effective and serves the interests of individuals and organisations, as well as the needs of Government. However, we have also seen too many examples where an important policy development has been preceded by a poorly conceived consultation exercise", therefore the Committee also called for regular reporting and more active management. In response the <u>Consultation Principles were updated in January 2016</u> and it would be now too soon to comment on any impact of the revised guidance to Departments. Many Departments now have online consultation hubs and some but not all of these include a section presenting a summary of consultation action and outcomes in plain English under the heading <u>We Asked, You Said, We Did</u>; this is welcome.
- 21. We have already noted that recognition of individual scientist's contribution is important in incentivising them to take part in public engagement and that this is a distributed issue with encouragement, support and reward potentially needed across many stakeholders including the employing institutions. In addition, assessments such as the REF would need to have regard to good practice in this area, either under consideration of impact or possibly, environment. The same is true of the kind of policy engagement inherent in consultation processes, particularly within the early phases of open policymaking. In fact the most recent REF included many impact case studies that focused on policy impact. The recent proposed introduction of an anti-lobbying clause into Government contracts (to take effect from 01 May 2016) had potential to reverse this and despite the stated intention of the Department for Business Innovation and Skills to introduce an exemption for researchers funded through Research Council, Higher Education Funding Council and Academies grants there remains considerable uncertainty for many Government funded scientists and a real risk that advisory and consultation engagement activity will be dampened. We and others have expressed our concern to Government Ministers.



The strategies and actions being taken by Government to foster public engagement and trust of science more widely, and high quality reporting of science in the media.

- 22. Government has a role to play in creating the environment for science and society to develop harmoniously; active engagement will be a part of this. Clear communication by Government of how it considers science evidence is vital. There may be times when decisions are taken that do not align with the science evidence, perhaps for social, political or economic reasons; clear communication that this does not negate the science evidence is especially important and should come from Government. Supporting science in a way that encourages and rewards genuine excellence will support trust-worthy science and help to support scientists to engage openly with the public and the media. The Prime Minister, Chancellor and Minister for Science among others frequently refer to the role and importance of science and this recognition has real influence. The Government Chief Scientific Adviser and the network of CSAs across Departments and their public comments are also hugely important.
- 23. There are some themes that are so large in scale or complexity that only a national or Government organisation could take on the task of engagement or its co-ordination. Themes and issues highlighted in the BBC Trust review of impartiality and accuracy of the reporting of science¹⁸ remain relevant as many are recurring challenges, particularly the danger of exaggerating a lack of consensus when presenting the full breadth of possibilities. In addition many recommendations of the Science Media Centre to the Leveson Inquiry are appropriate to this issue.¹⁹ Reporting of complex topics in a free press will frequently raise challenges but this should also raise opportunities. Distinguishing between science and the possible policy responses to science is part of this.

¹⁸ <u>http://downloads.bbc.co.uk/bbctrust/assets/files/pdf/our_work/science_impartiality/science_impartiality.pdf</u>

¹⁹ http://www.sciencemediacentre.org/wp-content/uploads/2012/09/Science-Media-Centre-Written-Evidence-to-the-Leveson-Inquiry.pdf (p9).



Appendix 1

Bioscience societies support science communication and public engagement in a variety of ways. This section provides some specific examples – it is not in any particular order and does not attempt to be comprehensive.

- Biology Week https://www.rsb.org.uk/get-involved/biologyweek was created by RSB and provides a focus and impetus for public engagement activities throughout the UK, among other activities. Events range from formal to informal and from lectures and expert debates to local hands-on creative challenges with a biology theme; created for children, families, students and professional scientists.
- The RSB has an active *Biology for All* programme (<u>https://www.rsb.org.uk/get-involved/biology-for-all</u>) that combines delivering activities with providing training and support to scientists and volunteers to enable public engagement.
- The British Ecological Society funds members to carry out public engagement activities through outreach grants, and in 2014 launched a public engagement programme to take ecological science to a wide range of audiences through events ranging from Glastonbury Festival to Chelsea Flower Show, whilst also providing training opportunities for members. The British Ecological Society approach to public engagement is based on encouraging a culture of dialogue and collaboration between ecological researchers and the public, maximising the transfer of knowledge between the two and generating mutual benefit rather than one way communication. http://www.britishecologicalsociety.org/education/public-engagement/
- The British Ecological Society has an active <u>Citizen Science Special interest Group</u> which provides a forum and community for ecologists to share experiences and expertise and support creativity and innovation in this area.
- The Biochemical Society's Scientific Outreach Grants give researchers and science communicators the
 opportunity to develop and deliver science activities. One of the criteria for these grants is
 consideration of 'hard to reach' audiences and we have had some very successful grants within this
 criterion. For example, Sai Pathmanathan's '<u>Experimenting with Storytelling</u>' project which has brought
 hands-on-science to children and families in deprived areas of the UK.
- The British Ecological Society runs an Ecological Ambassadors Scheme that aims to help PhD students and their departments build relationships with local schools. The ambassadors develop outreach activities that link to the curricula and hopefully encourage young people to consider further study in ecological sciences.



- Public engagement projects led by British Ecological Society members include:
 - BES Science Slam is a competition combining entertainment with science; scientists take to the stage to communicate their research in an entertaining and accessible way, with the winner decided by audience applause. During the British Ecological Society annual meeting six members took to the stage, competing to be crowned the winner in front of a 100 strong audience. <u>http://www.britishecologicalsociety.org/education/public-engagement/besscience-slam/</u>
 - Conker Tree Science is a real science project where participants recorded the damage caused by the leaf mining moth to the leaves of the horse chestnut tree. It ran from 2010 to 2013 and was for anyone to take part in. A scientific paper was produced from the results. http://www.conkertreescience.org.uk/
 - Soapbox Science is a public outreach platform for promoting women scientists and the science they do. The events follow the follow the format of London Hyde Park's Speaker's Corner and transform public areas into an arena for public learning and scientific debate. It aims to make sure that everyone has the opportunity to enjoy, learn from, heckle, question, probe, interact with and be inspired by some of our leading scientists.
 http://soapboxscience.org/
- The Biochemical Society is working to provide more regional support for science communication, through resources and training for members and others for example through the 21st Century BioChallenges kits).
- The Biochemical Society and RSB recently trialled a new public engagement activity 'The Hungry Games' at St George's Market in Belfast as part of the Northern Ireland Science Festival. The activities have been developed in partnership with the Nutrition Society and will be run at a number of other festivals throughout 2016.
- The Biochemical Society and RSB also ran a highly successful Synthetic Biology debate at the Royal Institution in 2015 which attracted 440 attendees.
- The Biochemical Society is working with the University of East Anglia and FutureLearn to develop a Massive Open Online Course (MOOC) for 15-19 year olds. The will include a diverse range of media and teaching approaches and aims to improve access to information on careers in STEM for students from diverse backgrounds (ie improve social mobility) as well as to encourage and inspire students to find out more about different STEM subjects.
- The Biochemical Society have also co-funded the development of the Bacteria Combat app developed in 2015.
- The Microbiology Society is running a project which gives the general public, students and educators in the UK and Ireland the opportunity to work with researchers to discover new antibiotics from soil



bacteria. The project aims to: raise awareness of the issue of Antibiotic resistance with the public, students and educators; to enable students and the public to experience and understand real research which in turn will inspire them to (continue to) study science; to understand how best to use a well-known global challenge such as antimicrobial resistance to engage the public in the scientific process. The Microbiology Society response to this Inquiry has further details of this project and the novel approaches adopted.

- The Microbiology Society also provides support and recognition to individual members of the Microbiology Society to engage the public and communicate their science. The Microbiology Society awards an annual Microbiology Outreach Prize and gives out grants for members to undertake outreach activities.
- The British Pharmacological Society and the Biochemical Society are collaborating on the Medicine Makers activity. The Medicine Makers, which was developed in late 2014, is a hands-on activity for school children and young adults to demonstrate using simple interactive models, how a painkiller binds to the receptor and relieves pain. The Societies are working on turning the Medicine Makers activity into a user-friendly resource pack for volunteers and teachers. This toolkit will be trialled out at the Imperial Science Festival this year with volunteer members.
- The British Pharmacological Society organises public engagement activities at various science festivals and events. For example, the British Pharmacological Society organised a public engagement talk at the Edinburgh Science Festival in April 2015 and collaborated with the Physiological Society on a session about miracle cures. The Pint of Science Festival is another popular public engagement activity in which the Society sponsored talks. The Cheltenham Science Festival in 2015 was a success following a talk about over-medication and was picked up by a number of Saturday newspapers including The Telegraph, Mirror and Daily Mail. At the Brighton Science Festival in February 2016, the British Pharmacological Society organised a talk to discuss and raise awareness of the implications of using drugs in sports and what is required to deter the temptation that arises.
- The British Pharmacological Society awards outreach grants (four in 2015), and previously funded outreach grant made to Lab_13 (an initiative to set up student-run laboratories in primary school). Funding from the Society was provided to the Gillespie Primary School in Islington for a project looking at whether Manuka honey was effective at preventing colds and symptoms of flu. The project was a success and led to a presentation at Cheltenham Science Festival which attracted considerable press attention and was then reported in *The Times* newspaper.
- Several societies have websites or online resources directly aimed at the public, including the Society for Endocrinology's <u>You and Your Hormones</u> website, the Microbiology Society's Microbiology Online website and the Physiological Society's website Understanding Life.



- The British Society for Immunology has worked in partnership with the RSB and the University of Manchester on the citizen science project <u>'#BritainBreathing'</u>. The British Society for Immunology supports its members to engage with the public by providing resources, volunteer opportunities and 'Communicating Immunology' grants. Further information on their website: <u>https://www.immunology.org/public-engagement/--bsi-public-engagement-</u>
- A number of other bioscience societies not mentioned above also have public engagement grants and staff members including <u>The Society for Applied Microbiology</u> and <u>The Physiological Society</u>, both of whom have representation on the RSB's Public Engagement Working Group. Both are also involved in a touring bioscience activity stand being co-funded by ten learned societies (see below).
- The RSB public engagement strategy focuses on diversity, in terms of the areas of types of audiences that we aim to engage with.

RSB Public Engagement Strategy Core Objectives:

- 1. To continue to reach those interested in biology while also reaching new audiences who would not actively seek science events or activities; namely family audiences and independent adults in under-served communities and other public arenas
- 2. To facilitate grass-roots delivery of public engagement across the UK
- 3. To improve our ability to demonstrate the impact of public engagement to funding organisations

Wider Objectives

- 1. To develop collaborative relationships with other organisations for specific projects, particularly for delivering events and activities at major science festivals
- 2. To link public engagement themes and activities with other Society projects and/or with national initiatives
- 3. To increase the quantity and quality of informal learning of biology across the UK by strengthening links to regional groups of the RSB and organisations that have regional programmes and representatives.

Examples of current activity aimed at achieving above objectives

 RSB is delivering activities at a diverse mix of events including major science festivals and nonscience public events. For example hands-on activities are being delivered at Glasgow Science Festival alongside a 'Café Sci' event on biotechnology for 'already interested' adults in June 2016. RSB is coordinating a range of bioscience organisations to deliver a mixture of hands-on activities at the annual free community event '<u>Lambeth Country Show</u>' in South London and are working with the organisers to ensure the activities are interspersed with other free non-science family cultural activities to reach new audiences – i.e. those seeking activities/ engagement but not necessarily science activities.



- 2. Facilitation of grassroots public engagement delivery by bioscientists is being achieved in a number of ways
 - a. Kits of ready-to-go biochemistry-themed activity resources '21st Century BioChallenges' for use by regional groups and reps of the RSB, members of other bioscience societies and other individuals/ organisations including schools and universities at festivals and other public events.
 - b. <u>Regional Grant Scheme</u> for individual members of the RSB to deliver public engagement activity events and activities around the UK and beyond
 - c. Online <u>resources</u> aimed at RSB <u>regional branch committees</u> and Regional Grant Scheme recipients. Includes <u>evaluation</u> resources and <u>guidelines</u> on running outreach events.
- 3. A memorandum of understanding has been developed between the RSB and nine of its <u>member</u> <u>organisations</u> to create a shared touring activity stand called 'Biology Big Top' aimed at increasing coverage of events around the UK by bioscience organisations and researchers, to pool resources, and to raise the profile of the biosciences by presenting a 'united front' to public audiences via a recognisable bioscience 'brand name' and an engaging and fun range of hands-on activities. The stand will be taken to three public events including Cheltenham Science Festival and Lambeth Country Show in 2016.
- 4. RSB coordinates a <u>Public Engagement Working Group</u> the group meets two to three times a year to discuss potential collaborations, current trends and opportunities in bioscience and public engagement with research.