

2 November 2010

Dear Sir or Madam,

In summer 2009 two Research Councils, BBSRC and EPSRC, commissioned the Synthetic Biology Dialogue¹. We wanted to begin a discussion to explore the hopes, concerns and aspirations that surround synthetic biology. In summer 2010 a report of this formal Dialogue was published, bringing together the thoughts of members of the public and of people with a professional interest in the field. This report is an important platform for ongoing discussions around synthetic biology and this letter is our response to the positive points it highlights and the concerns it raises.

The report reveals that people found the science and technology fascinating and were excited by its potential, for example, to help us tackle some of the big challenges society faces. But this perceived potential was also a source of trepidation and concern, for instance around the suitability of current regulations to cope with this new field and for the wider impacts of the technology. However, people's interest went beyond the outcomes of the science, and the discussions, particularly in the public workshops, exposed as much interest in the process of science as its outcomes. For instance questions such as, "Why are scientists doing synthetic biology?" and, "What do they hope to gain?" were asked early on.

The report calls on us, the Research Councils, as major public funders of synthetic biology research, to take a lead in making sure the discussions, concerns and hopes that the report highlights have influence on our policies and also those of others – for instance regulators and the private sector. We, as the chief executives of two major research councils in this field, are committed to taking the report's findings seriously and we will do all that we can to provide positive, responsive and responsible leadership in the light of societal discussions, concerns and hopes.

What's more, many of the issues expressed in the report apply more widely than synthetic biology and so it is important that the report's messages have a broad influence throughout the workings of the Research Councils and others. Whenever appropriate we will work with our sister Research Councils. Many of the actions discussed below already involve other Councils, including the Economic and Social Research Council and the Arts and Humanities Research Council and outside of the Research Councils family, the Technology Strategy Board and the Department for Business, Innovation and Skills.

As the two Research Councils that have led dialogue around synthetic biology, BBSRC and EPSRC will continue to work together on these issues, and both are committed to the response laid out below.

We'd like to thank all of those involved in the dialogue, including the public participants, stakeholders, experts and members of the steering and oversight groups.

¹ The Synthetic Biology Dialogue was a stakeholder and public consultation exercise commissioned by the Biotechnology and Biological Sciences Research Council (BBSRC) and the Engineering and Physical Sciences Research Council (EPSRC) with support from Sciencewise-ERC, it was carried out by TNS-BMRB and independently evaluated by Laura Grant Associates. Details here: www.bbsrc.ac.uk/syntheticbiologydialogue

Our actions fall into five categories:

1. Disseminating the report's messages

We will make sure that the report's messages are shared widely with the academic community, policy makers, parliamentarians, regulators, the commercial and industrial sectors and the public.

Some actions that we are already planning to help us do this are:

- producing a user-friendly summary of the report
- working with the Parliamentary and Scientific Committee to organise an event to discuss the dialogue, its messages and our response with parliamentarians
- engaging with the Department for Business, Innovation and Skills and the Government's Chief Scientific Adviser to consider how the concerns and hopes for regulation might be addressed and taken forward
- communicating about the report and synthetic biology through social media, websites, traditional media and making use of all opportunities to engage people with this emerging field

2. Incorporating the report's messages into our ways of working

Those who have taken part in the dialogue were clear that there was a role for us to help the researchers we fund to consider their motivations for doing synthetic biology research and to help them think about the issues that were raised by the dialogue participants. We will encourage our researchers to be aware of and sensitive to these issues and to be open and transparent about doing this. We will provide support to help them do this.

Actions we're intending to take include:

- arranging a workshop to bring together the synthetic biology research community, members of the public and others to discuss the report's messages and our response
- working across all of the seven UK Research Councils to support and further develop ethical and societal awareness training for researchers
- commissioning a piece of work to develop a process that helps research councils and researchers to better understand the benefits and risks of emerging technologies early on in the innovation process
- reviewing our procedures for the monitoring of ethical and other social issues raised by our research and, where relevant, ensuring that these processes address the report's messages
- exploring the use of input from members of the public to help shape the requirements on grant applicants to consider and demonstrate the social context of their work

3. Continuing the discussions

It's always been clear to us that the publication of this report is only the first stage in an ongoing conversation around synthetic biology, the issues it raises and its potential applications. We will work with our synthetic biology researchers, with those who took part in the dialogue and with new audiences to foster ongoing discussion.

To help do this we will:

- encourage research centres, such as our Synthetic Biology Networks, to develop and share public engagement tools, which will be made publically available
- promote contact and collaboration between the Synthetic Biology Network hubs and their local communities

With advice from our independent public issues advisory panels, we will be looking into ways of using more public input for shaping research programmes. This might be done by, for instance, convening citizens' panels to discuss the issues around research areas before committing funding in any particular direction.

4. Ongoing oversight

The report gives voice to people's worries, excitement, concerns and hopes. Synthetic biology is clearly an area that will continue to interest people, particularly as the field matures and applications begin to be developed that might impact on our everyday lives.

Actions:

- BBSRC and EPSRC's top decision making bodies – their Councils – will continue to monitor developments in synthetic biology

5. Learning from dialogues

The evaluation of the dialogue so far has been positive but no dialogue process like this is ever perfect and we recognise that there will be lessons to learn. We welcome feedback that will help us to be as effective as possible if we run similar projects in the future.

To help us capture any learning points from this process we will:

- work through RCUK (the body representing all the UK Research Councils), with the support of Sciencewise, to review this dialogue and previous Research Council dialogues so that we can identify what works well and what doesn't
- we will make sure the outcomes of this review are widely shared

In addition to the approaches and actions discussed above, the final evaluation of the Dialogue so far will be published in early 2011. We will make this publically available on our websites².

We are looking forward to working over the next months, and indeed years, to ensure that the insights, hopes, concerns, thoughts and discussions from all of the dialogue participants can truly impact synthetic biology research and our ways of working in the future.

Yours sincerely,



Douglas Kell
Chief Executive BBSRC



David Delpy
Chief Executive EPSRC

² www.bbsrc.ac.uk/syntheticbiologydialogue and www.epsrc.ac.uk