



Emerging science and technology: consultation on oversight

When a new development within science and technology emerges, how should society respond? What sort of oversight should be provided to ensure public safety? How can oversight be agile enough to ensure the benefits of new science and technology reach people quickly? And how might these decisions impact on the industry that develops in the years that follow?

Wellcome exists to improve health through great ideas. For those ideas to thrive, we need oversight to ensure they are safe, effective and timely. A new Wellcome project aims to map how this can be achieved, and what is needed to get there.

The UK has a long history of being at the forefront of innovation in science and technology. In areas such as [mitochondrial donation](#), the UK is playing a leading role in the scientific advances and development of the technique, evaluation, regulation and ultimately application in those families affected. That example, which took over a decade before licences for the technique to be used clinically were granted, also highlights the complexities that exist in considering how best to provide oversight for emerging technologies or new areas of science.

With Brexit prompting discussions about how the UK's regulatory system will look in the future, this is a good time to consider how the UK should approach oversight of emerging science and technology. The Government has also highlighted that if the UK is at the forefront of developing oversight in this area, it has the chance to [take a global lead](#) and be the key platform for these innovations. This is an excellent opportunity for the UK to consider how best to meet the oversight challenge.

We intend to deliver a framework for future oversight in emerging science and technology that enables the UK to achieve this in an effective, efficient and ethical way. **We are seeking evidence and views that consider innovative approaches to oversight within emerging science and technology.**

Oversight can include formal legislation, regulations and governance, non-regulatory standards and guidelines, and other informal elements like public engagement and international co-operation.

We would like to hear a wide range of perspectives, including those based on personal experience as well as specific expertise. You are welcome to respond only where you feel able, or comfortable.

Please help us to gather the widest possible range of views to inform this project, by sharing this consultation among those with an interest in this area, and members of your organisation.

Submission Guidance

- We welcome responses from individuals or organisations. Please state your name and affiliation (if applicable), and briefly introduce your relevant experience or expertise.
- We will only accept responses in Word format or as free text in an email, **not in PDF**.
- You do not need to respond to all questions.
- Please explain your rationale with examples (from personal or professional experience) and references wherever possible.
- Please keep your submission as brief as possible, with recommendations in bold and any key points at the top of your submission or email.
- We intend to publish responses. If you do not wish your response to be made available please state this at the top of your submission.

Questions

We invite your thoughts on three key areas. Please submit responses in an email or Word format to emtech@wellcome.ac.uk **by 20 November 2018**.

Approaches to oversight

Q1. Thinking of approaches in the UK and internationally, what are the key elements of good oversight that should be in the UK's approach for emerging science and technology?

- *These could include principles or practical features, and could be approaches successfully used in different sectors, or countries.*
- *Examples might include specific creative ways of testing regulation, such as regulatory sandboxes in the FinTech sector.*
- *You could also comment on what the UK needs to do differently in its approach to oversight to meet the elements you identify.*

Current opportunities

Q2. From your perspective, what current areas of emerging science and technology offer opportunities for the Government to improve how oversight is provided?

- *This could include innovations where an existing regulatory framework could be improved upon or replaced entirely, or where the system of oversight is still in development.*
- *Examples might include innovations that span multiple sectors, such as artificial intelligence and gene editing.*
- *You could also comment on how these should be prioritised, and where approaches highlighted in Q1 might be most beneficial.*

Horizon-scanning

Q3a. Thinking in the longer term about what may present challenges to existing regulation, which areas of science and technology still in their early stages of development should the Government be aware of?

Q3b. In the future, how do you think the Government should ensure that it is aware of emerging areas of science and technology in good time?