

HFEA

The use of hybrid and chimera embryos in research

Context and Aim

Stem cell research offers enormous potential to deliver new treatments for many diseases for which there are currently no effective cures, such as chronic heart disease and Parkinson's Disease. Part of this research relies on the use of human embryos – but these are in short supply and scientists have developed a technique where a nucleus is taken from a human cell and is injected into an animal cell which has had its nucleus removed. This creates a hybrid embryo. This is a controversial area of science and raises some profound moral and ethical issues.

A report by the Government's Chief Medical Officer in 2000, concluded that the creation of hybrid embryos should not be allowed. However, a House of Lords Select Committee on Stem Cell Research in 2002 decided that human-animal embryos would be useful for research. The responsibility for regulating this research lies with the HFEA.

In November 2006, the HFEA received two research licence applications to derive stem cells from embryos using animal eggs. This prompted the HFEA to organise engagement activities to test public opinion and explore how people balance the ethics, risks and benefits of mixing human and animal genetic material.

The consultation aimed to:

- Engage stakeholders in the scoping and development of dialogue
- Undertake a deliberative dialogue process with a diverse set of the public which aligned with the Government's Guiding Principles for Public Dialogue on Science and Technology

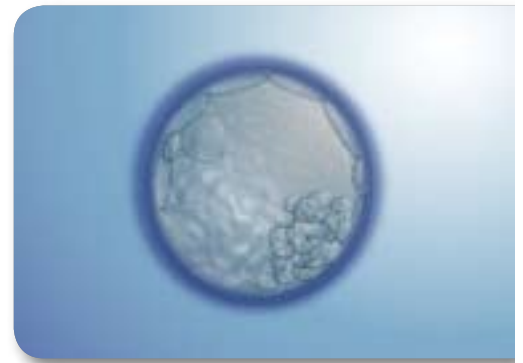
- Capture, analyse and report the results of the dialogue to inform policy recommendations.

The Process

The HFEA produced a consultation document explaining the science involved in creating different types of human-animal embryos. The first stage of the dialogue project involved establishing deliberative groups in which participants were taken through the science and their initial reactions gathered. The second part consisted of a full day workshop, which explored whether, and how, opinions changed when people were given further information and had the opportunity to discuss the issues in depth with scientists.

A public meeting was held in which a panel of speakers, holding different views, were questioned by the audience and an opinion poll was carried out to test wider reaction to the issues raised.

Alongside the public dialogue, a comprehensive literature review of the scientific context of such research was undertaken. Expert stakeholders were consulted, and the public were invited to take part in an online consultation.



Vital Statistics

Project delivery organisations:
Human Fertilisation and Embryology Authority (HFEA) and Opinion Leader Research

Duration of process: Nine months
(January 06 to Sept 06)

Number of participants:
More than 3000

Cost of project: £140,000
(Sciencewise contribution £60,000)

Key Impacts:

- The results of the dialogue fed directly into a major policy decision
- The mix of methodologies ensured that all participants were engaged
- Many participants discussed the issues with friends and colleagues
- The success of the project has led to the commissioner looking at dialogue in a wider context.

This project was funded through a grant to the commissioning agent to provide input into a live policy area.

Benefits and Impact

On Policy

The main impact of the dialogue was that it helped to determine the HFEA's policy on the creation of human-animal embryos for research purposes. After careful consideration of all the evidence gathered through the whole consultation, the HFEA decided that this type of hybrid research should be allowed in principle but should be tightly regulated.

Research teams wishing to pursue such research will now have to demonstrate to the satisfaction of an HFEA licence committee, that their planned research is both necessary and desirable and meets the HFEA's standards for embryo research. The HFEA has also decided to look at how science and research is communicated to the public in a wider context.

Other Benefits

An interesting feature of this dialogue process was the lack of negative press on the subject.

Although there was considerable coverage of hybrids and chimeras in the media around the time of the HFEA

decision, the design of the dialogue ensured that those on the extremes of the debate were aware it was being carried out, were invited to take part and were able to air their views in public. This conscious effort to create transparency at every stage helped to ensure that the risk of misinterpretation was minimised.

“ There is a clear demand from people to know more about what researchers are doing and their plans for future work, highlighting a need for better communication about science and research from both the scientific community and ourselves as regulator ”

Charles Lister, Head of Policy, HFEA

Dissemination of the Results

The report detailing the findings of the consultation and the policy decision taken by the Authority has been made available to participants through the HFEA website. Positive feedback on the value of the report has been received from stakeholders.

Learning from the Process

The different methodologies used in the project – deliberative groups, an open meeting, online consultation, opinion polling – captured a wide range of public perspectives. The information on the different types of human-animal embryos provided by the HFEA helped to ensure that the issues were clearly understood. The project had to be completed within a short timeframe in order for a policy decision to be made but participants dealt with the complexity of the information well and the time pressure and engaged in lively discussion.

The Advisory Group helped to ensure that materials used with the public were independent and balanced. However, there was a certain lack of clarity about the exact role of the group, which could have been addressed by clearer terms of reference.

The consultation amply demonstrated the need for increased communication with the public on complex and sensitive issues. There was great appreciation from participants in the deliberative work and in the open public meeting for being consulted and a strong desire from people to continue to learn about new science and technologies.

In the course of the consultation there was a great deal of support for the current regulatory structure, with emphasis placed on the need to regulate such research tightly and with high levels of scrutiny. Furthermore, the sensitivities surrounding medical research supports the need for the HFEA to communicate its role in regulating research.



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Web: www.hfea.gov.uk
Project Report: http://www.hfea.gov.uk/docs/Hybrids_Report.pdf