

On Being A (Modern) Scientist: Risks of Public Engagement in the Interspecies Embryo Debate

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LABTEC

LABTEC – the London & Brighton Translational Ethics Centre – is funded by a Wellcome Trust Biomedical Ethics Strategic Award (2009-2014). Interdisciplinary research being carried out in the Centre explores the ethics of translational research: from ‘unnatural entities’ to experimental treatments. It focuses on key developments in human embryonic stem cell research and neuroscience as critical instances of the translational interface between research and treatment, between science and medicine. The central ethical question is the acceptability of changing what it means to be human and/or a person. The LABTEC research programme builds capacity and adds value in three interlinking domains, by providing research training/academic career development; developing innovative methodological approaches combining normative and empirical ethics; and undertaking substantive work on the ethics of translational research.

Project Introduction

Scientists have increasingly realized the value (or necessity) of listening to, informing and engaging the public. Whether to tackle a crisis in public trust, justify public funding, or extend the reach of their research, considerable energy has been expended developing a meaningful dialogue between science and society. This project explored the risks and rewards for scientists who took part in an ethically controversial debate - the creation of interspecies embryos (typically cow eggs and human material). Headlines in UK newspapers captured the diversity of opinions. Whilst supporters emphasized the shift away from the use of ethically problematic materials (human eggs), critics focused on the instinctive ‘yuk’ factor of crossing species boundaries.

The project draws on interviews with key scientists who participated in the debate, and documentary material from the UK parliamentary inquiry on the subject. It examines how interactions between science and the public, and within the scientific community itself, revealed competing ideas about what makes a “good” scientist. In some cases, these interactions had undesired impacts on the careers of those involved.

Research Team

The researcher on this project was Dr James Porter (CBAS, Brunel), supervised by Professor Clare Williams (CBAS, Brunel) and Professor Alan Cribb (CPPR,

KCL). The Strategic Award is held by Professor Clare Williams (CBAS, Department of Sociology & Communications, Brunel University London), Director of LABTEC.

Aims of the Study

1. To explore why and how scientists engaged the public on this ethically controversial issue;
2. To examine the views, experiences and reflections of scientists involved in this ethically contentious debate;
3. To assess the potential risks and rewards for scientists of participating in public engagement.

Key Findings

* *Why did scientists engage the public?* In addition to the general increased expectation of public engagement, the answer is due in no small part to the UK Science Media Centre (SMC). By offering training on how to answer or sidestep difficult questions, the SMC familiarised scientists with the art of briefing the press. Unlike previous scientific controversies such as the genetically modified crop debate, where many scientists were reluctant to speak to the media, the SMC helped inspire confidence and build trust between the parties involved. This, in turn, enabled the SMC to act as gatekeepers. Granting (and less often denying) journalists access to interviews meant that the kind of publicity generated remained in keeping with the headline message of the scientists: “[SMC are] the master choreographers for these things... terrifically influential, [they] know who is likely to make our lives difficult... so we’re not exactly thrown to the lions, as tutored and protected”. These changing dynamics between scientists and journalists and indeed, the willingness of scientists to engage the public, point to the vital role that intermediaries including the SMC play in how controversial matters are communicated.

* *How, and whom, to engage?* Expectations were tailored differently depending on the audience. Optimistic scenarios presented at the parliamentary inquiry, in which the research was seen as offering an ethical solution to the use of human embryos, went hand-in-hand with more pessimistic ones. To gain political support, it was claimed that banning the research would “place the UK at a competitive scientific and commercial disadvantage, be seen by the world-wide scientific community as “anti-science” and completely at odds with pre-existing strong government support”. In other words, scientists predicted a series of negative futures in which the UK’s scientific

status could be undermined by a “*brain drain*” and decreasing levels of foreign investment. If the UK’s scientific base were to erode due to this proposed ban on the research, responsibility for any adverse effects would lie with those who took that decision.

* *Risky engagement?* Fitting public engagement into the already overstretched job descriptions of most working scientists can be problematic. When potentially career-damaging consequences are added in, the task becomes even more challenging. Three main risks were repeatedly flagged up:

i) *Self-promotion* - A major challenge for scientists was how to make interspecies research accessible, and in turn, acceptable to a non-technical audience. Being seen by scientific colleagues to do ‘too much’ media work, however, resulted in accusations of self-promotion, as opposed to promotion of the science: “*Given the level of media interest, I could see perhaps how people on grant-awarding committees... could say, ‘Well, you know, [s/he’s] only done this to try and get additional funding’.*” Such perceptions can be professionally damaging. Yet, in practice, the promotion of the “science” and the “scientist” cannot be neatly separated out. Furthermore, being overly critical of self-promotion also ignores its potentially beneficial effects. Directors of Research Centres, for example, must actively manage a public profile so as to attract funding for new equipment, resources and staff. Deciding how much media work scientists should undertake is therefore not easy. Too much risks being labelled a “*media tart*”, whilst too little allows others to shape the debate.

ii) *Exaggeration* – Wary of the intense competition for funding, scientists invested considerable energy in building up support. However, over-promising the need for the research can be risky, particularly when, as in this case, it fails to evolve. False promises can damage not only the individuals involved, but also the credibility of the wider field: “*I was concerned... [that we might be] arming our opponents, because if you say, ‘We absolutely need this to progress’... [but it goes] off in a completely different direction [then critics will say], ‘We told you that you didn’t need to it, you insisted you did, and look what happened, who was proved right?’.*” Eager to explain why the research had stalled, newspapers pursued sensationalist stories about research councils blocking the work on moral grounds. Potential funders issued statements countering these claims which in turn, had the effect of casting the scientists involved in an unfavourable light, “*as bad sports, unprofessional, or even conspirators*”. In this sense, creators of expectations are being held to account for what does or does not happen, with unexpected consequences.

iii) *Recognition and Reward* – There was a disconnect between the social value and academic rewards of public engagement. Despite undertaking numerous TV/radio and newspaper interviews and successfully persuading

parliament to pass new legislation, scientists complained that these “*achievements*” were not recognized or valued by the scientific community: “*I submitted our grant review... highlighting the Centre’s research outputs etc... Despite a whole section of the [funder’s] form asking about public engagement, which I happily filled in, not a single reviewer commented on it. It’s frustrating because clearly they’re only interested in the publications*”. Part of this frustration was that the academic rewards – grants, promotions and papers – that usually come with prestigious funding were not forthcoming in the area of interspecies embryo research, as the emergence of a new technology (iPS cells) increased competition for funding. Ultimately, these scientists were unable to secure grants or the time needed to turn these social efforts into academic outputs, to the potential detriment of their careers.

* *Investing in Engagement?* - If scientists become increasingly concerned about the amount of time they dedicate to public engagement, this could negatively affect the carefully built dialogue between ‘science’ and ‘society’ that has developed over the last decade. To that end, this project’s findings reveal the engagement dilemmas facing scientists in the twentieth-first century who aim to be intellectually and socially productive, without compromising the science at hand.

Dissemination

These findings have been disseminated to diverse audiences at national and international conferences, invited seminars, and form the basis of an editorial for a special issue on the “*politics of expectations*” in the journal *Geoforum*. The project, as a result, has sought to further scholarship in medical sociology, geography, science and technology studies and public policy.

Selected Publications

Porter J, Williams C. Wainwright SP & Cribb A. (In Press) On being a (modern) scientist: potential risks of engaging the public in the UK interspecies embryo debate. *New Genetics & Society*.

Harvey A & Salter B. (In Press) Anticipatory governance: bioethical expertise for human/animal chimeras. *Science as Culture*.

Harvey A & Salter B. (In Press) Governing the moral economy: animal engineering, ethics and the liberal government of science. *Social Science & Medicine*.

Brosnan C. (2011) The sociology of neuroethics: expectational discourses and the rise of a new discipline. *Sociology Compass*: 287-97.

Williams C & Wainwright S. (2010). Sociological reflections on ethics, embryonic stem cells and translational research. In Capps, B.J. & Campbell, A.V. (Eds) *Contested Cells: Global Perspectives on the Stem Cell Debate*.

Further information including reports and publications:
www.brunel.ac.uk/sss/research/cbas/labtec