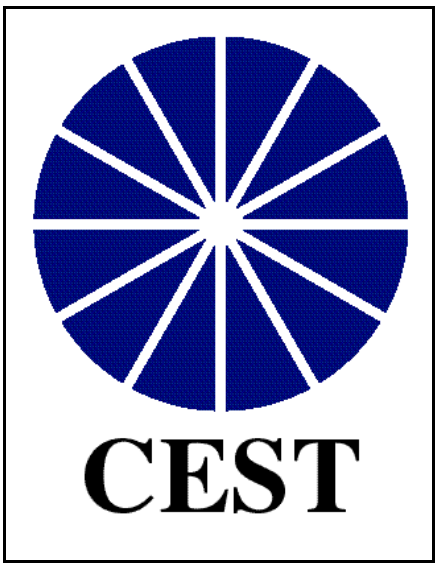

Genetics in Context:

Aligning strategy in life science communication

Thursday 14 June 2001

Commonwealth Club, London

CEST FOR LIFE SCIENCES PROGRAMME

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ATTENDEES

Organisation

Abbott Diagnostics

Ardana Bioscience

Association of British Pharma Industries

Aventis

BBSRC

BioIndustry Association

COPUS

Department of Trade and Industry

English Nature

Genetics Interest Group

Health and Safety Executive

University of Cambridge

House of Lords

Human Genetics Commission

Medical Research Council

Nycomed-Amersham

Office of Science and Technology

Pfizer

Scottish Executive

Swiss Re

CEST

Key points emerging from the discussion dinner

- Proactive communication is the key to building and maintaining public confidence.
- The degree of resonance of single issues with underlying fears colours peoples' reactions.
- Core underlying fears are of untrustworthy, unregulated scientists "messing with nature" for commercial reasons.
- Communication must be early and often.
- Concentrate on the benefits and not just the science.
- Be careful with language and metaphor.
- Don't spring surprises; do build grass roots support.
- Everyone has multiple agendas - this must be recognised and acknowledged.
- Genetics must be placed in context, genohype defused and genetic determinism refuted.
- Collaboration will aid communication through improvements in consistency of language; alignment and sharing of strategies for how to reach key target audiences; and exploration of how to determine if goals have been attained.

A synopsis of the meeting follows in 4 sections:

1. **Introduction and welcome**
2. **Proactive communication: the key to building and maintaining public confidence**
3. **Conclusions of CEST's communication consultation**
4. **Discussion**

1. Introduction and Welcome

Philip Wright (CEST) welcomed participants and gave a short outline of the aims of the meeting. Earlier this year CEST was commissioned by its members to undertake a scoping study of practices and strategies in life science communication. The main aim of the study was to identify whether such practices and strategies could be enhanced by working with others who are tackling similar issues. We found that although many organisations are involved in communicating aspects of genetics and other life science issues from their own perspectives, initiatives are often fragmented and can appear inconsistent to external observers. Specific areas that we suggest may benefit from collaboration include:

- Messages: What topics are shared interests?
- Consistency of language: what is "genetic modification", what makes genetics "special", what is a "genetic test"?
- Audiences: Who do we need/ want to build dialogue with?
- Channels: How do we reach our target groups?
- Targets/Audit: How do we know we are making a difference?

Philip also reminded participants that the meeting would operate under the Chatham House Rule (namely that all contributions other than the presentations would be unattributable outside the meeting).

2. Proactive Communication: the key to building and maintaining public confidence- *Simon Best* (Ardana Bioscience)

Simon Best is the CEO of Ardana Bioscience, an Edinburgh biotech company set up in 2000 to commercialise research from the Medical Research Council's Human Reproductive Science Unit. He is also the Vice-Chairman of the BioIndustry Association of the UK. Simon has extensive experience of dealing with tough communication issues from his previous roles with Zeneca Plant Science (GM tomatoes) and Geron Bio-Med (Dolly, stem cells and cloning). He has also served on the US Biotechnology Industry Organisation's board and bioethics committee for several years.

Underlying public concerns

Simon opened by exploring some of the deeper issues that underlie public perceptions of genetics and biotechnology. These are important since the degree of resonance of single issues with these underlying fears colours peoples' reactions. For example declining understanding and a feeling of loss of personal control and power makes people feel anxious. There has also been a decline in trust in most public institutions and a real loss of deference. This extends from politics (sleaze), through industry (perception of greed) to science (where there has been too much hype and not enough delivery). In this climate conspiracy theories and X-file scenarios flourish and fear grows.

Because technology is complex and is a major driver of social change it is an obvious conduit for some of the underlying concerns, especially where there is an appearance of technocratic elitism/control. Biotech is a particularly prominent target because of the resonance with "messing with nature" and because it generates the scariest headlines. Although many of the issues raised in

debate about biotechnology are new and important, many fears are not new, merely "projections of sins of the past".

"Anti-progress" coalitions encourage concern by segmenting the fear market. They separate issues that more properly should stand comparison; for example use of agrochemicals compared with use of GM varieties. They also campaign separately on issues such as GM food, cloning, embryo research and genetics=eugenics. By adopting single-issue campaigns it is easier to portray certainty and simplicity and these focussed messages build commitment and community. Together such campaigns advance a broader anti-progress agenda.

The implications of these observations are several. There is a pervasive cynicism and general tendency not to hold beliefs as part of a deep-seated philosophy. Campaigns succeed where they reinforce implicit beliefs and appeal genuinely to people. This represents an opportunity for pro-biotech voices. We all need to re-evaluate and promote our beliefs and core values. If we don't speak up and the industry stumbles we only have ourselves to blame. However, the voices of the industry must be practitioners - the real faces of industry and science. Hired guns and PR gurus will not be taken so seriously in this type of debate in the current atmosphere of cynicism and distrust. Since regulators have not retained trust it is also unwise to rely on them as messengers. A direct case has to be made to the public, laying out the benefits of the products.

Moving forward - the challenge

Compared with at the time of the New Genetics consortium meeting that addressed communications last year (see www.cest.org.uk/newgenetics/ngsummary.pdf for a summary),Simon says he now feels more optimistic. The recent stem cell debate that accompanied the votes in the UK parliament allowed strongly held views to be voiced on both sides and resulted in a positive advance for stem cell research. More recently the extremist direct action of SHAC against animal testing, and Huntingdon Life Sciences in particular, failed to resonate with the public and led to some institutional consolidation. And there was very little politicking over science or environmental matters in the UK election campaign just concluded.

Many concerns coincide when the public view of biotechnology is examined. There are worries about playing god; about impacts on human health; effects on the environment; privacy and use of information; risk/benefit comparisons; imbalances of power; and a lack of respectability for the profit motive. Each issue has to be dealt with, paying attention to each of these concerns. One of the major communication paradoxes and challenges is that biotechnology is seen as operating within nature. While this is an appealing concept to biotechnologists who see this as a potential way of reducing environmental chemical impacts, it is decidedly scary to most others who see it as "messing with nature". Although practitioners see biotechnology as an evolutionary technology we must not lose sight of the fact that the revolutionary impacts claimed imply power, and perceptions of power (or more accurately how it is controlled) generate fear.

What can be done?

Since these are big issues with many manifestations, any communication strategy has to be long term. Lots of time is required and communication must be "early and often". Science and industry must raise their game. Communication has to be regarded as a core activity and high level corporate time must be set aside for it. Since transparency is key to engendering trust all interests and agendas must be fully visible. Although there is increasing public scepticism about endless scare stories in the media it is probably not possible to prevent at least one "feeding frenzy" in each area. But this can be managed and perhaps helped to take place a long time before the ultimate decision making. The remaining time will hopefully be filled with more informed debate. The alternative is to be caught off guard when it is too late to retrieve the situation satisfactorily. The arguments for why the media prefer bad news and simple messages are well rehearsed but are probably linked to a co-evolution of commercial dynamics with single-issue politics. In the end newspapers need to sell copies and broadcasters need ratings.

So a pro-active approach is indicated. Know your enemy and actively counter misinformation. Track currents in public opinion, debate and feelings. Understand who or what builds trust. For example dieticians and doctors are trusted sources of food information, particularly in the US. Don't go it alone but instead band together with those of common cause in vertical or horizontal coalitions. Most importantly build grass-roots support by reaching out to the general public. This is not a common tactic for business in the UK but has been particularly successful in the US. We need to demonstrate that everyone has multiple agendas and provided there is full and frank disclosure, a commercial interest should not disbar you from participating in honest debate. Finally, don't rush and don't spring surprises! With these comments Simon concluded by opining that public confidence CAN be built and maintained.

3. Conclusions of CEST's communication consultation

Alastair Philp opened by reminding participants that this project had grown from one of the strands of the New Genetics programme that CEST ran last year (for a summary of the programme conclusions see http://www.cest.org.uk/newgenetics/ngsummary.pdf). One of the meetings of the New Genetics programme concentrated on communications and provided the following advice:

- Make time to interact and debate. "True dialogue needs time for people to think".
- "Say it clearly, when someone is listening, using language we can all understand"
- Understanding doesn't always lead to acceptance
- Do not underestimate the public's intelligence, do not overestimate their knowledge
- Identify audiences and understand their values and concerns
- Understand who builds trust and talk to them
- A communication strategy requires 5 steps: audit, objectives, strategy, evaluation and next actions
- Celebrity endorsements make a difference

Through our consultation exercise we have discussed these issues and investigated how strategies in communicating life sciences might better be aligned. We have discovered a plethora of individual

communications activities but little co-ordination between public and private sector communication programmes. The most pressing need however is for messages that set genetics in context.

The need: genetics in context

Collectively we need to develop strategies to allow comparisons of alternate technologies, for example conventional agriculture with chemical pesticides, and GM varieties. We also need to refine communication strategies in the medical biotech area to defuse genohype. Much has been promised from decoding the human genome and we must be careful to emphasis that genes are not the whole answer. The idea of genetic determinism - i.e. that "you got the gene, now get the disease" - must be combated, for example in the genetics and insurance debate. Genetics does predispose people to developing medical conditions but gene: environment interactions are more important (and much less well understood).

On the basis of our consultation we see five areas that might benefit from a collaborative approach:

- Messages: What topics are shared interests?
- Consistency of language: Can we agree on words and definitions?
- Audiences: Who do we need/ want to build dialogue with?
- Channels: How do we reach our target groups?
- Targets/Audit: How do we know we are making a difference?

Messages and consistency

There are many areas where balanced debate is important and therefore where proactive and aligned communication would be helpful. If messages can be aligned among groups with similar agendas time can be spent engaging opposing views rather than contradicting similar but slightly divergent viewpoints. Important issues include new generation GM crops; animal experimentation (why not place "this product tested on animals" on all medicines -its true!); genetic databases; stem cells; skills shortages; genetics and insurance; and genetics, lifestyle and healthcare delivery (predictive medicine will throw up lots of probabilistic information with attendant requirement for explanation and what lifestyle changes might be advisable). The consistency of language is another area where co-ordinated action might yield rewards. For example can we agree on what "genetic modification" means? Or better think of some catchy alternative? Maybe it is too late here but it might be something to ponder for the future. Similarly a common perception of "what is a genetic test?" would be useful. Not all genetic testing is new and not all genetic tests rely on novel DNA-based technologies. Blood group typing and PKU testing are just two examples of well-accepted non-DNA genetic tests.

Audiences, Channels and Audit

An understanding of who needs to be engaged and about what is a useful starting point. Identification of their knowledge needs and prioritising of who needs to be spoken with first will also help. A core strategy shared by multiple participants would help development of such a programme of communication; always realising that there will be a need for individual action too.

We should not forget the power of internal communication. Having all your employees (or most of them at least) as ambassadors in building grass roots support is a welcome justification for telling them what you (corporately) are up to.

The channels that can be deployed to build dialogue have been summarised recently by Gary Kass at the UK Parliamentary Office of Science and Technology (POST; see http://www.parliament.uk/post/pr153.pdf). The major questions are which combinations give sufficient reach, and allow dialogue to be built, and how can proxy groups/ trusted mouthpieces and celebrity endorsements best be deployed?

In the end we need to understand markers of how our communication efforts have made a difference. This might be a reduction in antagonistic headlines or it might be a rise in the share price. Or more contented staff? Whatever these markers are, and collective action might help refine what to look for, recognition of what works in certain circumstances will guide future efforts. Sharing in a collective forum (such as tonight's meeting) of what has worked for individual organisations and what has not worked will speed learning curves and may prevent expensive communication failures.

4. Discussion – key points raised

Addressing perceptions, formulating strategy

- The US is keener on biotech because they have more of their pension invested in the industry.
- It takes a long time to have a public debate and there really is no substitute for engaging in the hurly-burly of it. A collective approach to strategy setting will however aid participation in the debate.
- Although previous genetic diagnostics have been around for years there is a perception that testing for cretinism and PKU is less dangerous in some way than DNA-based diagnostics.
- Why don't people believe the Home Office when they say animal experimentation is heavily regulated and only done where necessary? If there is no counter voice to "anti-vivisectionists" people wonder what the government and industry are hiding. In this arena and in others we need to stand up for our views but in the presence of activists "be careful". A collective approach however does diffuse the individual risk.
- The need to consider individual applications of biotechnology rather than saying all implementations are good is a point well taken but as with much public policy debate, nuances often get lost. Collective approaches are also poorly suited to complex differentiations since different parties are less likely to agree on details. However, engaging in a project of communicating your social responsibility allows you to stay ahead of the game and prevent others putting words in your mouth.
- Segregation of attitudes: GM crop debate didn't affect medical biotechnology (yet). However the convergence of medical and agricultural biotech issues will grow particularly with the advent of vaccines in plants, and the possibility of therapeutic drug production in plants too.

- The genetics and insurance debate is not about genetics but about the use of personal information by insurance companies. Similarly the support for genetic databases used by the police comes from the perception that they are for "catching bad guys". Biopolicy public debate is often not about science at all but about underlying public concerns revealed in new guises by technology advances.
- There has been no genetic revolution. The influence of genetics in evolution of medical and agricultural advances will be profound but currently is more akin to rising damp than to the tidal wave trumpeted by genomics sages.

Concentrate on the benefits and not the science

- Concentration on the process and technology can be less productive than explanation of benefits and display of useful products. For example, electricity as a concept is quite scary and if it didn't drive light bulbs and motors we might decide we were better off without it. Discussion of how it is generated doesn't really assuage these fears. However where concerns are with "messing with nature" the process, and its differences and similarities with classical methods, have to be touched upon.

Language and metaphor

- We shouldn't under-estimate the power of the "g-word". Picking up on one of Simon's slides perhaps we should emphasise our personal values rather than beliefs when describing why we view some manifestations of biotechnology as "a good thing"? The use of values rather than beliefs indicates a less polarised set of views perhaps?
- We have to consider ethics and equity as well as risk: benefit calculus. Different people handle uncertainty very differently and ways of describing risk are not universal.
- A third of the population see biotechnology as tampering with nature. The eugenic past is not so very past. So we have to be very careful with metaphors such as "secret of life", "book of man" and "essence of humanity". These phrases may attract venture capital and NIH funding but if the work is so profoundly linked to deep concepts of identity and soul, is it surprising that tampering with it is seen as bad news? The titling of a book about cloning as "The Second Creation" appears a major faux pas, although this was an editor's choice and not what Iain Wilmut wanted.
- Don't use god and divine design metaphors. They are too powerful and liable to backfire
- The use of concepts such as "issues minefields", "know thy enemy" and "know thy friend" may be counter-productive if they heighten tensions and prevent dialogue
- There is a selling job to be done. But language very much does matter. So does the "gene for…" metaphor so routinely seen in the media. Simplicity sells. But it also misleads. Beware.

Concluding comments

A number of participants commented that while they were unconvinced of a need for a major on-going programme, there was merit in retaining this current network and to hold informal meetings periodically. No decision was made on who should organise the next meeting, although it could be rotated amongst participants to spread the burden and cost.

CLOSE

These minutes prepared 25 June 2001 by Alastair Valentine Philp. Please contact Alastair with any comments or clarifications.