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Rigour, respect and responsibility: a universal ethical code for scientists

The Nuffield Council on Bioethics is grateful to the Council for Science and Technology (CST) for the opportunity to comment on the current draft of **Rigour, respect and responsibility: a universal ethical code for scientists**.

In principle, the Council welcomes the idea of a universal ethical code for scientists. There is very little in the draft with which we would disagree, primarily because the provisions are of a general nature. We take the view that the Code may make a useful contribution by promoting reflection among scientists about ethical issues raised by scientific research.

We are aware that the current consultation focuses on ways in which the Code can be used in practice. In the event of the Code being revised in the future, some suggestions from the Council concerning the substance of the Code are also enclosed at Annex A.

The Council shares your view that the issue of whether there is a role for an overarching universal ethical code for scientists is an important one and we wish you success in devising and

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implementing a Code which can help to foster ethical research,
encourage active reflection and support constructive
communication.

Professor Sandy Thomas
Director

NUFFIELD COUNCIL ON BIOETHICS

A response from the Nuffield Council on Bioethics to the call for views by the Council for Science and Technology on *Rigour, respect and responsibility: a universal ethical code for scientists*

1. General Comments on the use of *Rigour, respect and responsibility: a universal ethical code for scientists*

Relationship to other Codes

As recognised in your consultation letter, many scientific institutions already have codes of conduct and ethical frameworks in place, usually specific to the interests and needs of that institution. Care should be taken to ensure that the Code is an overarching document that serves to create greater clarity, rather than confusion.

Implementation of the Code, and enforcement of its provisions

We presume that the CST liaises extensively with organisations such as the Royal Colleges and major funders of research, such as the BBSRC, the MRC and the Wellcome Trust, in order to ascertain ways in which the scientific community can be made aware of the Code, and how, where meaningful, specific provisions can be enforced. One option would be to include the Code in employment contracts and/or research grants, as envisaged by the CST.¹ Whether this option could be realised would clearly need to be ascertained in discussion with the relevant bodies.

The rather general nature of the document may pose some problems for enforcing the Code. While it may be straightforward to identify violations of the law that are unacceptable according to the Code, it may be less straightforward to identify whether or not individuals have, for example, sought 'to discuss the issues that science raises for society' or have taken all reasonable steps to '[m]inimise and justify any adverse effect [their] work may have on people, animals and the natural environment.'

Use of the Code for teaching purposes

We note that CST's consultation letter envisages the option of using the Code for teaching purposes for school children, under- and post-graduates. In this context the brevity of the Code may limit its usefulness. It might be helpful to add an explanatory memorandum explaining further the aims of the respective provisions, along the lines of the information provided in the Commentary under the draft Code in the consultation letter.²

¹ Consultation document, p 2

² See also: http://www.ost.gov.uk/society/good_practice.htm

2. Specific comments on the wording of *Rigour, respect and responsibility: a universal ethical code for scientists*

There is very little in the draft with which we would disagree, primarily because the provisions are of a somewhat general nature. We realise that the brevity is partly due to the intention to produce a very short document. Nonetheless we consider that the draft could be improved by including reference to, in particular:

- the positive role scientific research can play;
- more detail on the notion of the public good;
- the importance of the international context within which research takes place;
- the role of risk assessment.

A revised version of the Code, which incorporates some suggestions for amendments, is at the end of this document. Brief explanations for the revisions are provided below.

Section 1: Rigour, honesty and integrity

Comment on global inequalities

We note that the Code claims universal applicability and is not restricted to practice by scientists working in the UK. It would hence be useful to acknowledge the fact that there are dramatic differences in scientific development across the world.

Scientists should be asked to take reasonable steps to reduce this inequality, as, for example, also acknowledged in Article 2 (vi) of the recently approved Universal Declaration on Bioethics and Human Rights (see also Articles 12 and 15 *ibid.*).³ This could be addressed by adding a sentence at the end of the first bullet point:

“Consider what contribution you can make to promoting scientific knowledge and practice in disadvantaged areas such as developing countries.”

Section 2: Respect for life, the law and the public good

Comment on positive contributions of science

The provisions in this category seem to focus on an image of science as a potentially dangerous activity that needs to be contained. Accordingly negative obligations are formulated, for example, not to cause harm to a range of entities. It would be valuable to emphasise the positive duties of

³ “...to promote equitable access to medical, scientific and technological developments as well as the greatest possible flow and the rapid sharing of knowledge concerning those developments and the sharing of benefits, with particular attention to the needs of developing countries;”

all scientists to generate knowledge and contribute to the production of related benefits. Hence, a new first bullet point could be introduced:

“In pursuing your work, maximise knowledge and benefits to humans, animals and the environment. Minimise any adverse effects.”

Comment on risk assessment

There is no mention of risk assessment or management. These are categories of crucial importance for most members of the public in relation to scientific activities. A sentence along the following lines could be added, omitting the first bullet point:

“The ratio of risks to benefits should always be justified explicitly. Comply with applicable laws.”

Comment on clarification of obligations concerning ‘the public good’

The amendments suggested above may help to address in what way ‘the public good’ should be respected. A further provision could be added to address increasing concerns that some aspects of science policy, such as interpretations and applications of patent law, may not always promote the public good. Accordingly, a new bullet point could be added:

“Strive to make accessible, as far as reasonable, to other researchers and the public, knowledge and applications derived from your research, and tools required by other researchers to pursue similar and further work. In securing rewards a reasonable balance needs to be struck between personal benefit and promoting the public good.”

Section 3: Responsible communication: listening and informing

Comment on engaging in dialogue

The first sentence is unclear with regard to which issues are raised by science, and where discussions should take place. Scientists giving presentations about the beneficial outcomes of their work at academic meetings would appear to comply with the provision, although more seems to be intended. To clarify the intent, the following wording could be adopted, replacing the first bullet point:

“Consider ways in which you can engage in dialogue with other scientists and members of the public about not only scientific issues raised by your work, but also the wider ethical, social, legal and economic implications.”

A version of the full Code in which the above comments have been incorporated is below.

Summary of the Comments by the Nuffield Council on Bioethics on ***Rigour, respect and responsibility: a universal ethical code for scientists***, drafted by a working group chaired by the Government's Chief Scientific Adviser, Sir David King

Note: suggestions for amendments are underlined, deleted sections are in ~~strikethrough~~.

Rigour, respect and responsibility: Good practice guidelines for scientists

Rigour, honesty and integrity

- Act with skill and care in all scientific work. Maintain up to date skills and assist their development in others. Consider what contribution you can make to promoting scientific knowledge and practice in disadvantaged areas such as developing countries.
- Do not engage in, and take steps to prevent, corrupt practices and professional misconduct. Declare conflicts of interest.
- Be alert to the ways in which research derives from and affects the work of other people, and respect the rights and reputations of others.

Respect for life, the law and the public good

- In pursuing your work, maximise knowledge, and benefits to humans, animals and the environment. Minimise any adverse effects. Ensure that your work is lawful and justified.
- ~~Minimise and justify any adverse effect your work may have on people, animals and the natural environment.~~
- The ratio of risks to benefits should always be justified explicitly. Comply with applicable laws.
- Strive to make accessible, as far as reasonable, to other researchers and the public, knowledge and applications derived from your research, and tools required by other researchers to pursue similar and further work. In securing rewards, a reasonable balance needs to be struck between personal benefit and promoting the public good.

Responsible communication: listening and informing

- Consider ways in which you can engage in dialogue with other scientists and members of the public about not only scientific issues raised by your work, but also the wider ethical, social, legal and economic implications. Seek to discuss the issues that science raises for society. Listen to the aspirations and concerns of others.
- Do not knowingly mislead, or allow others to be misled, about scientific matters. Present and review scientific evidence, theory or interpretation honestly and accurately.