

Model ethical guidelines covering research with  
dual use potential in nuclear weapons science

# ATOMS FOR PEACE?

THE ATOMIC WEAPONS  
ESTABLISHMENT AND  
UK UNIVERSITIES

*A collaborative report from*  
NUCLEAR INFORMATION SERVICE  
MEDACT

## ABOUT THIS REPORT

Nuclear Information Service and Medact have undertaken a two-year study to investigate research links between British universities and the Atomic Weapons Establishment (AWE), which is responsible for designing and manufacturing the UK's nuclear weapons.

We found that approaching half of British universities have research links with AWE. Much of the work funded by AWE qualifies as 'blue skies' research which is not aimed at any particular application. However, some of the research funded by AWE may have 'dual use' potential - the capability to be used for both benign, peaceful purposes and military purposes contributing to the development of weapons of mass destruction.

Our study highlights the need for increased transparency over the nature of university research funded by AWE, and the need to strengthen the framework for considering the ethical implications of such work and its impact upon the research environment.

To help universities and researchers navigate ethical issues arising from participating in research work funded by AWE, Nuclear Information Service and Medact have prepared this set of model ethical guidelines, which are presented and discussed in more detail in the main report for the study.

To read the report in full please visit <http://tinyurl.com/awescience>

## MODEL ETHICAL GUIDELINES

These model ethical guidelines are intended to supplement a university's own research ethical scrutiny arrangements, given that university arrangements are often not designed for the purpose of addressing ethical dilemmas relating to broader issues of social responsibility. Universities are invited to review their own ethical guidelines and enhance them as appropriate to match the model guidelines.

Ethical guidelines need to be based on clearly articulated ethical principles. In the case of research work which may have the potential to assist in the development of nuclear weapons, we propose that these principles should be the international legal principles which outlaw the development and use of weapons of mass destruction.

1. All university staff and students participating in AWE-university partnerships must take personal responsibility for understanding the range of potential impacts that may arise from the intended research on the environment, human rights and wellbeing globally, and on the potential proliferation or development of nuclear weapons. In some cases this responsibility might involve seeking expertise from outside the research community.
2. Collaboration should support the aims of the key international treaties relating to the control of weapons of mass destruction. Work with potential dual use outcomes that

could undermine the objects of these treaties should not take place in universities. Specific mechanisms should be put in place to assess whether 'blue skies' research funded by AWE will pass this test and ensure that such research will be targeted at disinterested end-points and the broader public interest. Space should be created to allow consideration and discussion of such issues before decisions to undertake research with AWE are taken.

3. There should be full transparency concerning collaboration between AWE and university researchers, wherever possible, and the output from such funding, including patents, publications and presentations should be easily accessible in the public domain. This process should include disclosure of the collaboration with names of researchers, quantities and sources of funding. Details of research studies should be published in public spaces such as websites and press briefings prepared by participating universities, AWE, the Ministry of Defence and / or the UK research councils.
4. Clear instructions should be widely circulated on how and under what circumstances concerns about unethical or irresponsible behaviours can be reported to those in an appropriate position to take action.
5. Security-classified research should only be undertaken by AWE in-house staff and not by university researchers, or in university facilities, in order to facilitate an open university environment for publishing and discussing research.
6. There should be a paramount right for university staff and students to have freedom of investigation, publication after peer review and the dissemination of data arising from research undertaken through an AWE contract or funding.
7. Publication of the findings of research funded by AWE should follow guidance from the Committee on Publication Ethics (COPE), and clearly show the source of funding and acknowledge any conflicts or potential conflicts of interest in publications that arise from the collaboration.
8. University ethics committees, AWE's Corporate Ethics Manager (and, at the programme level, possibly also the UK Research Integrity Office) should be approached to provide pro-active advice and guidance and give a robust ethical evaluation of proposed research projects and advise whether they are in the public interest. The emphasis should be on publicly available knowledge creation rather than short-term economic collaboration where researchers in universities function as close-to-patentable R&D departments for their commercial clients.
9. Conflicts of interest, bias and censorship should be dealt with by ethics committees whose primary objectives are to allow the pursuit of disinterested research (which has potential broad value to the public and the knowledge base) of the highest quality and maintain standards of academic freedom and transparency.

10. Ethics committees responsible for implementing these model guidelines should contain not only representatives from the participating institutions but also non-partisan representatives appointed to help safeguard the public interest as well as those who have independent and expert knowledge of security and ethical areas.

## SOME QUESTIONS TO ASK BEFORE EMBARKING ON RESEARCH WITH DUAL USE POTENTIAL IN NUCLEAR WEAPONS SCIENCE:

- **Will the research contribute to the aims of international agreements which outlaw the development and use of weapons of mass destruction, or could it undermine them?**
- **What can be done to try to assess potential future applications of this area of science? What might the negative impacts of any such applications be?**
- **How would my family and friends feel about me undertaking research in this field sponsored by this funder? How might it impact on the reputation of my institution?**
- **If I become concerned about the particular direction a research project may be taking, what will I do?**

Nuclear Information Service is a not-for-profit, non-government information service which works to promote public awareness and foster debate on the risks and costs of the UK's military nuclear programme.

Medact is a global health charity tackling issues at the centre of international policy debates. Led by its health professional membership it undertakes education, research and advocacy on the health implications of conflict, development and environmental change.

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**Nuclear Information Service**  
Ibex House  
85 Southampton Street  
Reading  
RG1 2QU

0118 327 7489  
[www.nuclearinfo.org](http://www.nuclearinfo.org)  
[office@nuclearinfo.org](mailto:office@nuclearinfo.org)

**Medact**  
The Grayston Centre  
28 Charles Square  
London  
N1 6HT

020 7324 4739  
[www.medact.org](http://www.medact.org)  
[info@medact.org](mailto:info@medact.org)