

## **The approved review process for research with human participants and data in Schools of Technology and Physical Sciences**

The Councils of the School of Technology has approved a lightweight ethical review model, informed by current practice that has been inaugurated within the school of Physical Sciences by the Geography department, and within the School of Technology by the Computer Laboratory. This is based on the report that is compiled by a working group chaired by Alan Blackwell (CL), with representatives from JBS, IfM, EDC, Physics and Geography, and in consultation with other Schools and Universities.

- Geography model: <http://intranet.geog.cam.ac.uk/research/ethics/>
- CL model: <http://www.cl.cam.ac.uk/local/committees/it-strategy/ethics.html>

The previous output from our working group has been a compiled set of guidance for technology research with human participants and data. This is delivered via a CamTools wiki (in order to be easily updated and enhanced), and is accessible at <http://bit.ly/hhttps-guide>

### **Process outline and variations**

There are three stages of review in the general model we recommend. These three stages can be accommodated within variations based on current practice of different departments. The three general stages are:

- Self-assessment
- Departmental review
- Specialist panel

We assume that each department will establish its own policy, in accordance with local needs. In particular, some departments within the schools carry out large amounts of research with human participants and data, while others carry out very little. We have conducted a preliminary survey to confirm the extent of current research, but should note that some departments are not aware of how much research of this kind is carried out within their own department. This three stage model is intended to encompass the needs of all departments, with process variants such as those below.

**Variation A:** Every research project in the department is preceded by consideration of ethical issues (including general issues of research governance and plagiarism), whether or not the research involves human participants or data. Each individual researcher records this via online self-assessment. This variant is currently in use in Geography. It is also applied in pure technology departments at other Universities, for example in the Computer Science department at St Andrews.

**Variation B:** Individual researchers are presumed to have considered general ethical issues, but no record is kept of this consideration. Self-assessment is carried out only in cases where the research involves human participants or data. Researchers are assumed to be aware of this distinction. This variant is currently in use in the Computer Laboratory. However, we note that our preliminary survey found many researchers in the Schools who do work with human participants and data, but had not considered that ethical review might be necessary - this suggests that variation B may not be sustainable.

**Variant C:** An individual within the department takes responsibility for a whole set of research projects carried out by others, and makes a blanket judgement regarding the risks in that set of projects. The individual researchers carrying out the projects may be asked to consider some ethical issues (for example, on a project proposal form), but will not be personally responsible for the assessment. In this variant, we believe that self-assessment by the person making the blanket judgement would not be appropriate, and that the judgement should be reviewed by a departmental ethics committee.

## Stage 1: Self-assessment

We recommend that individual self-assessment of projects be carried out by the researcher who will undertake the research. The typical aim of this assessment is for the researcher concerned simply to consider and confirm that no ethical concerns are raised. A set of web pages already used for this purpose in Geography can be adapted for use in other departments. An automated record should be kept of the researcher's name, title of project, and date of the self-certification decision. Where a project involves human participants or data, the person completing the online form will need to refer to the research guidance wiki prepared by the working group.

For clarity, 'researcher' is intended to refer both to University staff, and also to students carrying out research projects, whether graduate or undergraduate. *VARIANT: if Variant C of our process is adopted by some departments, the person making the blanket judgement might be a supervisor or undergraduate course director.*

- Name of research project
- Name of person completing form
- Statement that the researcher is aware of the University policies on plagiarism and ethical conduct of research, and will comply fully with these (include a link to relevant department policy, training course, individual declaration etc that applicants are supposed to be aware of).

### University policy statements and guidelines

Statement on Plagiarism	<a href="http://www.admin.cam.ac.uk/univ/plagiarism/students/statement.html">http://www.admin.cam.ac.uk/univ/plagiarism/students/statement.html</a>
Misconduct in Research	<a href="http://www.admin.cam.ac.uk/offices/research/research/misconduct.aspx">http://www.admin.cam.ac.uk/offices/research/research/misconduct.aspx</a>
Ethics in Research	<a href="http://www.admin.cam.ac.uk/offices/research/research/ethics.aspx">http://www.admin.cam.ac.uk/offices/research/research/ethics.aspx</a>
Good Research Practice	<a href="http://www.admin.cam.ac.uk/offices/research/Research/Good_Practice.aspx">http://www.admin.cam.ac.uk/offices/research/Research/Good_Practice.aspx</a>

- This project will not involve observation, interviews, experiments with human participants, collection or use of personal data, or release of instrumented software. *VARIANT: In Variant B, this question would not be necessary, because self-assessment is only carried out where the reply to this question is already known.*

If this option is *not* checked then:

- What kind of study is this (using one of the classes defined in our research guidance wiki)

The remainder of the process depends on the kind of study:

- Unproblematic studies - specific departments may consider certain kinds of study to be routine and unproblematic, within strictly defined boundaries. For example, interviewing other Cambridge students, meeting a commercial collaborator, or visiting an industry field site as a member of a group. The precise criteria are likely to differ according to department, and the kind of research that is routine in that department.
- All other studies with human participants or data - self-certification will not be sufficient, and the applicant should inform the department ethics committee of the nature of the study. This should preferably be done via email, rather than constructing a more complex standardised form, because the nature and methods of technology research with human participants can be so diverse.

## **Stage 2: Departmental review**

Departments should maintain a small local committee, that can be consulted in the event that self-assessment reveals some risk of direct or indirect harm to participants. This committee need not have specialist expertise in research with human participants, but could offer pragmatic guidance on likely risks and legal constraints, as well as assessing the adequacy of problematic research proposals.

Emails requesting approval from a department committee should contain:

- Name of research project
- Name of person sending request
- Planned start and end date of study
- What kind of study this is (using the terms defined in the research guidance wiki)
- Brief description of the research objectives and how the study will be carried out
- Description of the precautions that will be taken to avoid problematic concerns that can arise in this kind of study, informed by the content of the relevant guidance wiki page
- (in some departments) statement that the proposal has been reviewed and approved by the research supervisor

## **Stage 3: Specialist panel for human participation in technology research**

We also recommend that an expert review panel be convened, reporting to the schools of Technology and Physical Sciences, to which problematic cases can be referred by departments. This would be complementary to the existing University panels dealing with psychology research, and with social science research. We believe that research concerned with evaluating technology or investigating the design and management of technology involves methods and concerns sufficiently distinct from those existing panels that convening a new body is justified. This panel would offer guidance and review of problematic cases identified by departmental committees or individual researchers. Those committees and individuals would however also be free to forward requests directly to NHS committees or the Psychology Research Ethics committee as at present, in cases where the research is clearly related to the concerns of those bodies.

This panel would ordinarily work by correspondence, in order to be able to respond rapidly to enquiries from department committees or from individuals. As a starting point, enquiries should include all information that would be required by the department committee, plus:

- A description of any specific concerns that have not been anticipated in the guidance wiki

The panel is likely to request further information from applicants before either agreeing that the study can proceed with specific precautions, or recommending modifications to the planned study. In cases requiring specific expertise outside the scope of normal technology research with human participants, applications may be referred to other University or NHS panels.

Alan Blackwell  
May 2011