

An Ethical Code for Research at the School of Technology University of Cambridge

Preamble

1. The School attaches considerable importance to the maintenance of high ethical standards in the research undertaken by its academic and research staff and students, whether supported directly by the School or funded from external sources. It is our obligation to ensure that research undertaken in the School is conducted to appropriate standards, conforms to generally accepted ethical principles and is in line with the values of the University of Cambridge.
2. The School recognizes that in many cases outside research partners or funding organisations have their own ethical standards. A number of funding bodies already require research proposals to undergo independent ethical scrutiny, a trend which is likely to increase. This ethical code should be seen as a complement to these existing standards, not replacing them.
3. Companies and Foundations increasingly ask suppliers and business partners about their commitment to ethics and transparency. Addressing ethics may therefore make our School more attractive to potential business or funding partners.

Where does this Code apply?

4. Ethical issues can arise in a wide range of situations, including those relating to ideas, plagiarism, teaching advice, research and other pedagogical information, safety and the environment, professional practice, employment, race and religious equality, intellectual property, patent and legal issues, responsible research, computers, data storage, confidentiality and new technology. The relationship between the School and its national and international funders and commercial partners naturally provides scope for conflict of interest and ethical dilemmas. International research may bring along additional difficulties which may not be encountered within the UK.
5. Legislation will dictate in many situations how to approach and solve ethical dilemmas, but this will not always be the case. However, legislation should not be the only driver of our School's approach to ethical issues.
6. All research involving human participants, identifiable personal and/or medical data or animals, can be subject to ethical scrutiny by the researchers and by the School of Technology's Research Ethics Group.
7. All materials prepared for examinations or for submission to conferences and publications, should be submitted according to the highest academic standards with respect to recognition of previous work and the involvement of other researchers.

Process

8. It is, in the first instance, up to the individuals and the individual research teams and their PIs to determine what is, and is not, acceptable behaviour for their organisations. In all circumstances, researchers should act with rigour, honesty and integrity in all their scientific work. They are also required to have respect for life, public good and act within the law. They have to ensure that their work is lawful, and justified, minimising any adverse effect their work may have on people, animals and the natural environment. Any of the following factors are likely to make the ethical context more complicated:
 - i. Subjects in research who are minors or have disabilities;
 - ii. Experiments that are likely to cause physical or mental distress or embarrassment; in all cases, consent forms should make it clear that subjects can withdraw at any time;
 - iii. Experiments and/or data analysis and interpretation involving deception;
 - iv. Data storage in any form that would allow individuals to be identified.

It is the scientists' responsibility to seek further guidance in case of doubt. The University's Psychology Research Ethics Committee has published a useful handbook giving guidance on policy issues and pointers to further documents.

9. The School of Technology does not require applicants to seek permission for every application, provided that:
 - a. Due consideration is given by the applicants to the School's policy;
 - b. Advice has been sought in case of doubt;

However, the School's Research Ethics Group should be informed prior to commencing research programmes on human participants or material derived from humans. All applicants using human subjects or human-derived materials **must** apply to the Human Biology Research Ethics Committee or Psychology Research Ethics Committee for ethical approval and **comply** with the Human Tissue Act (2004). The Human Tissue Act regulates removal, storage and use of human tissue and makes consent the fundamental principle underpinning the lawful storage and use of body parts, organs, tissues and cells from the living or the deceased for specified health-related purposes. It also creates a new offence of DNA "theft", i.e. having human tissue with the intention of its DNA being analysed without the permission of the person from whence it came.

10. Where required, independent ethical scrutiny can be dealt with by a School Research Ethics Group with a minimum membership of three faculty members who have no personal or departmental conflict of interest with respect to the particular research proposal concerned plus a Human Resources and legal representative. Under normal circumstances, this Research Ethics Group will be chaired by the Head of the School, or his/her representative. He/she may count as one of the membership of five, provided that he or she has no such conflict of

interest. The Research Ethics Group may, at its discretion, request advice and guidance from colleagues within the School with particular expertise, and in addition may call upon outside experts to assist with advice as required. The Group will aim wherever possible to notify the applicant of positive advice or difficulties with the proposal within maximum two weeks of the request. It is recommended that this time delay should therefore be incorporated into the research proposal preparation timetable at an early stage. If difficulties with positive advice arise, the Research Ethics Group will consult with the applicant and seek to resolve the issues. In case of conflict within the Research Ethics Group, the decision of the chair on the advice will be binding.

11. The Research Ethics Group can be called upon to provide independent ethical advice where a funding body requires it, where a researcher requests it, or where the Chair of the School deems it necessary.
12. Colleagues are encouraged to address ethical considerations explicitly in their research proposals. At the very least, it is suggested that they would address:
 - a. Transparency in declaring the source of all funds received and ensuring that the independence and integrity of research is protected at all times in face of possible donor pressures;
 - b. Honest reporting to research staff and subjects about the purpose, methods, and intended and possible use of the research, as well as any risks involved;
 - c. Confidentiality of information supplied by research subject and anonymity of respondents;
 - d. Independence and impartiality of the researchers to the subject of the research.
13. Where research is funded by an external organisation, or by an individual donor, the School of Technology's policy is to acknowledge openly the funding source in all publications.
14. Where research is being conducted in collaboration with another institution outside the University, the ethics policies of those institutions should be appended to any proposals to be considered by the Research Ethics Group.
15. Collaboration with research institutions outside the UK raises special ethical issues related to personal and national disparities in wealth, power, the legal status of the research, political interest and national political and security systems. Researchers are encouraged to bear in mind these differences and provide for them in the evaluation of the ethical consequences of their work. Researchers should also be aware that there may be a number of national laws and administrative regulations which can affect the conduct of their research pertaining to data dissemination storage, publication, rights of research subjects, sponsors, employers and employees. Researchers should also realise that, with a few exceptional circumstances, social research data is not privileged under the law and that laws may vary by jurisdiction. In the USA, particularly important are the federal regulations governing human subjects' research, the Privacy Act, the Freedom of Information Act, and the Copyright act. In locations far away

from the UK, matters such as disparity of resources or access to publications may need to be handled with sensitivity.

Grievance

16. In the case where one or more members of the School wish to raise a grievance about ethical issues in research, he/she/they should write in the first instance to the Chair of the Research Ethics Group, citing the circumstances involved. It is expected that the School's Research Ethics Group, with or without external consultation, will seek to resolve the grievance to the satisfaction of all parties.

Implementation

17. This code will be shared with all new staff and research students. Its implementation may be audited once every three years and a report with suggested changes will be shared with the Council of the School of Technology.

Revised, 28 January 2011