

## Policy for Research Ethics

### 1. Introduction

This policy is to be followed by all members of the staff and student body at the Royal Agricultural University when engaging in research. Staff and postgraduate research students will be made aware of these guidelines by the Director of Research. Undergraduate and taught postgraduate students will be made aware of them by their programme dissertation coordinator and/or dissertation supervisor in advance of any research being undertaken. The guidelines will also be available from the Student One Stop Shop on the Intranet.

All final year undergraduate, masters and postgraduate research students are expected, as part of their initial research proposal, to sign a statement that they have read and understood the Code:

***'I confirm that to the best of my knowledge I have made known all information relevant to the study and I undertake to inform my supervisor / Head of School of any such information which subsequently becomes available whether before or after the research has begun.'***

and on submission of their dissertation to sign that they have followed the Code:

***'I declare that the research described in this dissertation is in accordance with the Royal Agricultural University's Code for Research Ethics.'***

### 2. Aim and Objectives

#### Aim

To establish and promote amongst both staff and students, good ethical practice in the conduct of academic research.

#### Objectives

- (i) To encourage researchers to adhere to best practice relating to the ethical development, implementation and dissemination of research.
- (ii) To protect the integrity and reputation of the Royal Agricultural University.
- (iii) To protect the rights of participants.
- (iv) To protect the rights of fellow researchers.
- (v) To promote sustainability, enhance biodiversity and optimise energy usage in an environment of finite natural resources.

### 3. A universal ethical code for researchers

In 2005, the Council for Science and Technology set out a universal ethical code for scientists, encouraging all individuals and institutions to adopt and promote the code, and to encourage active reflection on the wider implications and impacts of research undertaken by individuals and institutions where scientific methods; including social, natural, medical and veterinary sciences, engineering and mathematics; were being adopted. It is copied below as it is of direct relevance to all research undertaken by staff and students of the Royal Agricultural University:

#### **Rigour, respect and responsibility: a universal ethical code 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.
- 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**

- 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.

##### **Responsible communication: listening and informing**

- 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.

(Council for Science and Technology 2005)

Academic Staff and Students are encouraged to reflect on and debate how this code may relate to their own work. For example, acting with rigour, honesty and integrity may include: not committing plagiarism or condoning acts of plagiarism by others; ensuring that work is peer reviewed before it is disseminated; reviewing the work of others fairly; ensuring that primary data that may be needed to allow others to audit, repeat or build on work, are secured and stored.

### 4. Specific Guidelines for Research Ethics

#### 4.1. Respect for the Person

- a. Respect must be shown for all those participating in the research process, whether actively or passively. Participants include:
  - i. subjects of observation, inquiry, test or experiment;
  - ii. collaborators;
  - iii. those assisting with the research process;
  - iv. those with responsibility over the space in which the research is conducted or over the participants of the research, and
  - v. those who form part of the immediate context in which the research is being undertaken.
- b. The University's commitment to inclusivity, equality and diversity must be reflected in a non-discriminatory approach to participants in the research process. Respect for the person does not depend on gender, age, race, religion, sexuality or any other distinguishing feature.
- c. Researchers must seriously and comprehensively consider the question of informed consent in the research process. The working principle should be that participants in research should give their informed consent to the research process. Particular concern and consideration must be taken with the issue of informed consent where the research involves minors. Researchers should consider, with appropriate consultation, to what extent children are able to give their consent in the particular circumstances of the research.
- d. Consent should be obtained from the institution (company/organisation) where the research is to be conducted. As a general principle, the more wide-ranging the research, the higher level of consent required.
- e. The seeking of consent must be genuine. Prospective participants must have the opportunity to decide not to participate, without suffering any consequences for so doing.
- f. Consent must be informed. Researchers have a responsibility to seriously and comprehensively consider the question of informing participants in the research of the content of that research. In particular, participants should be informed of any negative effects which the research may have on them (for example, emotionally, professionally, in terms of stress).
- g. There may be occasions when the researcher considers that the full disclosure of the content and likely impact of the research process will negatively affect the integrity of the research process and its results. Due consideration must nonetheless be given to the impact of this lack of full disclosure on participants in the research process and the priority should always lie with the well-being of participants.
- h. Participants must have the right to withdraw their consent any at any point within the research process.
- i. Respect for participants includes respect for privacy. Results should normally be reported in such a way that the identity of individuals cannot be

determined. Particular concern must be taken where the data collected might be construed to be of a personal nature. If such data is to be collected, this should be communicated to the participant concerned before the research commences.

- j. Researchers should be clear about the type of data to be collected and the method of collection, and this must be a key consideration when obtaining informed consent. This is particularly the case when the method of data collection involves covert observation of human interaction. The researcher should take care to ensure that participants are as far as possible aware of the period during which their actions or words contribute towards the research findings. Particular care should be taken over the use of data obtained from what might normally be construed as private conversations or actions.
- k. Respect for participants includes respect for the working conditions and roles of contract staff. These should be clear and fair.
- l. Researchers must be aware of any potential conflicts of interest in their work arising from their position within the research context. In particular, researchers in a position of authority arising from or separate from the research process should be aware of placing other participants in a situation where they feel obliged to participate in the research or to produce particular results.

#### **4.2. Respect for the Integrity of Knowledge**

- a. Researchers must not falsify or distort research findings, nor plagiarise the work of others. Particular care should be taken to ensure full and appropriate citation of the work of others.
- b. Researchers must be aware of undertaking research in an area where they may be perceived to have a conflict of interest, for example in the form of a commercial or professional benefit accruing from particular results.
- c. Researchers should show a sympathetic awareness of the research community within which they are working. Where criticism of the results or methods of others is deemed necessary, this should normally be constructive and carefully considered.
- d. Due credit should be given to the contribution made by all of the researchers involved in a project. Authorship should be credited to those who have had a substantive input into the research output in question, with the appropriate relative weighting being accorded to authors (for example, in terms of the order of authorship) irrespective of professional position or seniority.
- e. Researchers should be careful not to engage in research which they know to be beyond their competence. They should have the ability to use the appropriate methodological tools required for the research in question. Considerations of competence need particularly full assessment when entering into contracts with external funding bodies.

### **4.3. Respect for Animals**

The Animal (Scientific Procedures) Act 1986 regulates 'any experimental or other scientific procedure applied to a protected animal which may have the effect of causing that animal pain, suffering, distress or lasting harm'. Any such research requires a **Home Office licence**.

The Secretary of State requires that an ethical review process be maintained in each establishment designated under section 6 or 7 of the Act. Every establishment is required to explain to and test with the Animals (Scientific Procedures) Inspectorate a viable ethical review process. The satisfactory performance of this requirement is a standard condition for the continued operation of the Home Office licence.

**To meet the requirements of the 1986 act, all proposed research activities involving animal subjects must be approved in advance through the University's ethics approval process.**

The University does not currently undertake any work requiring a Home Office licence and any proposal to do so would be considered 'high risk' under the review process set out Section 5 below. During such a review, the committee reviewing the proposal would ensure that:

- a. all animal use under the Animal (Scientific Procedures) Act 1986 is carefully considered and justified;
- b. proper account is taken of all possibility for the reduction, refinement and replacement of the use of animals under the above mentioned Act;
- c. that a 'culture of care' is created by ensuring that all staff associated with animal work are appropriately trained and are competent to undertake their role;
- d. it obtains a report from recipients of project licences at the end of the project which includes the results achieved, any resulting published work and any unforeseen ethical issues raised by the project.

### **4.4. Respect for the Environment**

- a. Researchers should identify and follow established codes of best environmental practice.
- b. Wherever possible and practicable, researchers should minimise the use and waste of energy, reducing emissions and recycling materials.
- c. The protection, restoration and enhancement of biodiversity in all terrestrial and marine habitats should be encouraged by reducing pollution.

- d. Researchers with an interest in agriculture need to protect and conserve natural resources for future generations in a sustainable fashion.
- e. Researchers have a duty to raise the environmental awareness of others, by training and education, especially in relation to the environmental impact of their own research.
- f. Where appropriate, researchers should develop, with their supervisory team, a set of environmental standards that can be regularly monitored and reviewed in relation to their research.
- g. Researchers have a duty to communicate the environmental consequences of their practices and findings to a wider public audience, in an open and transparent fashion.

#### **4.5. Principles of Good Research Practice**

The following information has been adapted from the BBSRC Statement on Safeguarding Good Scientific Practice, published January 2006 (BBSRC 2006).

##### **a. Professional Standards**

###### **Honesty**

At the heart of all research endeavour, regardless of discipline or institution, is the need for researchers to be honest in respect of their own actions in scientific research and in their responses to the actions of other researchers. This applies to the whole range of research work, including experimental design, generating and analysing data, publishing results, and acknowledging the direct and indirect contributions of colleagues, collaborators and others. All individuals must refrain from plagiarism, piracy or the fabrication of results.

###### **Openness**

While recognising the need for researchers to protect their own research interests in the process of planning their research and obtaining the results, the University encourages the researchers it funds and supports to be as open as possible in discussing their work with other researchers and the public. Once results have been published, where appropriate the University expects researchers to make available relevant data and materials to others, on request.

###### **Guidance from professional bodies**

Where available, the University expects researchers to observe the standards of research practice set out in guidelines published by research societies and other relevant professional bodies.

##### **b. Leadership and co-operation in research groups**

The culture and tone of procedures within any organisation must be set by individuals in authority. With research, it is the responsibility of the Director of Research and senior colleagues to ensure that a climate is created which allows research to be conducted in accordance with good research practice.

Within a research group, responsibility lies with the group leader. These individuals should create a research environment of mutual co-operation in which all members of a research team are encouraged to develop their skills and in which the open exchange of research ideas is fostered. They must also ensure that appropriate direction of research and supervision of researchers is provided.

**c. A critical approach to research results**

Researchers should always be prepared to question the outcome of their research. While acknowledging the pressures of time and resources under which researchers often have to work, the University expects research results to be checked before being made public.

**d. Documenting results and storing primary data**

Throughout their work, the Royal Agricultural University requires all researchers, whether staff or students, to keep clear and accurate records of the research procedures followed and of the results obtained, including interim results. This is necessary not only as a means of demonstrating proper research practice, but also in case questions are subsequently asked about either the conduct of the researcher or the results obtained. For similar reasons, data generated in the course of research must be kept securely in paper or electronic form, as appropriate. The University expects data to be securely held for a period that complies with the requirements and best practice of the funding body, research council or legislative requirement as appropriate.

**e. Publishing results**

The Royal Agricultural University expects that research by postgraduates and staff will be published in an appropriate form. Papers published in refereed journals are strongly encouraged. This has long been widely accepted as the best system for research results to be reviewed through the refereeing process and made available to the research community for verification or replication. In recent years, however, questions have been raised, in particular about the growth in number of authors of individual papers, and the implications of increasing pressures to publish. The issue of authorship is important in the context of good scientific practice, and the University expects it to be taken seriously. The Royal Agricultural University expects anyone listed as an author on a paper to accept personal responsibility for ensuring that they are familiar with the contents of the paper, and that they can identify their contributions to it. The practice of honorary authorship is unacceptable. The Royal Agricultural University expects suitable acknowledgement of financial support in all publications.

**f. Acknowledging the role of collaborations and other participants**

In all respects of research, the contributions of formal collaborators and all others who directly assist or indirectly support the research must be properly acknowledged. This applies to any circumstances in which statements about the research are made, including provision of information about the nature and process of the research, and in publishing the outcome. Failure to acknowledge the contributions of others is regarded as unprofessional

conduct. Similarly, collaborators and other contributors carry their share of the responsibility for the research and its outcome.

#### **g. The needs of new researchers**

Researchers who are new to the scientific community may face particular difficulties. Responsibility for ensuring that students and other new researchers understand good research practice lies with all members of the community, but particularly with senior researchers. Research institutions should have in place systems which allow students and new researchers to adopt best practice as quickly as possible, for example, formal training or mentoring schemes.

### **5. Ethical review and approval process**

All research projects undertaken by RAU staff or students involving humans, living animals or negative impact on environment will require formal ethical approval before the work can commence.

All research projects undertaken by undergraduate students and post graduate taught students will be initially reviewed by the module organiser to identify all projects that involve humans, living animals or negative impact on environment.

All projects involving humans, animals and environment must be approved by one of the following routes:

- **Low risk** : Chair (or deputy) of Research Ethics Review and Approval Sub-Committee. This would be relevant for projects where there is no possibility for harm to humans, animals or environment with no further legal implications.
- **Medium risk** : Research Ethics Review and Approval Sub-Committee This would be relevant for projects where there is possibility for harm to humans, animals or environment possibly involving further approval steps.
- **High risk** : Research Ethics Review and Approval Sub-Committee **and** RAU Ethics and Sustainability Committee. This would be relevant for projects where there is clear risk of harms and / or reputational risk arising from the work.

All human and animal related projects approved by this process will receive an ethical approval number. The approval would normally be limited to the expected duration of the project as defined in the approval form and in any case never exceeding 5 years.

### **6. References**

BBSRC (2006). Statement on Safeguarding Good Scientific Practice. Available online at [http://www.bbsrc.ac.uk/web/FILES/Policies/good\\_scientific\\_practice.pdf](http://www.bbsrc.ac.uk/web/FILES/Policies/good_scientific_practice.pdf)  
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Council for Science and Technology (2005). Universal ethical code for scientists.  
Available on-line at <http://www.bis.gov.uk/assets/cst/docs/files/whats-new/ethical-code-letter-doc.doc> [Date accessed: 29<sup>th</sup> May 2012]