

POLICY ON SAFEGUARDING GOOD ACADEMIC AND SCIENTIFIC PRACTICE AND DEALING WITH ALLEGATIONS OF MISCONDUCT IN RESEARCH

Section 1

Principles of Good Academic and Scientific Research Practice

1. Good academic and scientific practice includes:

- *Fundamentals of academic and scientific work such as:*
 - *maintaining professional standards;*
 - *documenting results;*
 - *questioning one's own findings;*
 - *attributing honestly the contribution of others;*
- *Leadership and co-operation in research groups;*
- *Taking special account of the needs of new researchers; and*
- *Securing and storing primary data.*

These principles should be widely disseminated within the College and should be integrated into academic teaching and research training of post-graduate students. These principles, and those elaborated below, are supplementary to standards issued by professional societies and to international standards such as the Helsinki Declaration and the College's Ethics Policy for research involving human subjects.

2 Leadership and Organisation

It is the responsibility of the College's Senior Management, Heads of Departments, Directors of Research and Heads of Research Centres and Units to ensure that a climate is created that allows research to be conducted within the principles of good academic and scientific practice.

Whilst adherence to the principle of good academic and scientific practice is the responsibility of each individual, the College and each of its Departments and Research Centres and units has a responsibility to provide an environment conducive to such good practice. This includes:

- Providing an environment that allows for mutual trust in conversations, discussion and even disagreements;
- Development of a division of labour within research groups that must allow for reciprocal criticism and verification of new findings within the group;
- Research group leaders should maintain an awareness of activity within their group and the leadership chain in any group should not become too long;

- Ensuring that commercial pressures do not influence research outcomes;
- Introducing adequate induction programmes of new or inexperienced research staff to include seminars on Ethical Issues, Intellectual Property Rights and the Data Protection Act

3 Education of New Researchers

The education and development of new researchers needs special attention. Departments, Research Centres and Units should ensure that responsibility for mentoring new researchers is clear.

- 3.1 Each new researcher should have a more senior researcher primarily responsible for his or her progress and should receive adequate supervision. It might also be advisable to nominate additional experienced academics who are available for advice and help if needed.
- 3.2 It is important to ensure that students and research assistants are not put under unwarranted or unsupervised pressure to produce results at any cost.

4 Planning Research Work

All research projects should be conceived, designed and implemented according to the highest standards as laid out below

- 4.1 Clear documentation of the rationale for the study and any subsequent modifications - typically in laboratory notebooks or, for more complex projects in well-kept files. Each key document and any changes should be signed and dated by the researcher responsible to establish the provenance of the study and protect intellectual property rights.
- 4.2 In clinical intervention studies, identifying a health professional who will take overall responsibility for the well-being and interests of healthy volunteers involved and ensuring that their rights (eg in terms of consent and confidentiality) are protected in accordance with the considered judgement of the ethics committee.
- 4.3 Identifying the individual or group that will take ultimate responsibility for overseeing the scientific and ethical conduct of the study as the plans are put into practice. This is especially important in projects affecting patients or volunteers and in other complex and collaborative programmes.
- 4.4 Consultation with patients or other beneficiaries/consumers where appropriate, especially in clinical and applied research.
- 4.5 Consultation with statisticians at the planning stage where relevant. The statistical power of a study should be an early consideration and researchers should draw on professional statistical advice if needed. This is especially important for studies involving people or animals to avoid unnecessary or unproductive experiments.
- 4.6 Ensuring that organisations responsible for the care of any patients involved are aware that the research is being planned.
- 4.7 Regular review of progress so that new findings can be taken into account and the project plan modified accordingly, especially if plans involve any risk to participants or use of animals.

5 Use, calibration and maintenance of equipment

- 5.1 Equipment used to generate data should be appropriately located, safe, suitable for the purpose, of appropriate design, and of adequate capacity. It should be calibrated and serviced regularly by trained staff so that performance is optimal and the results can be trusted. A designated person should be responsible for ensuring the proper use and maintenance of equipment and, where appropriate for training staff in its use; when this is not possible, the users themselves should take on the responsibility. Records should be kept of calibration, servicing, faults, breakdowns, and misuse of equipment.
- 5.2 A Standard Operating procedure should be maintained for each piece of equipment; in some cases this might be the manufacturer's instruction manual. There should be easily accessible instructions for the safe shutdown of equipment in the case of emergency.

6 Retention of Primary Data

Primary data produced at the College as the basis for publication should normally be stored at the College, for a period at least as long as that required by any sponsor which has funded the research.

- 6.1 Storage of primary data is essential for reproducibility, both internally and by external laboratories, and is therefore a *sine qua non* of good science. The loss of primary data is common to cases of academic and scientific misconduct and justifies a *prima facie* assumption of dishonesty or negligence.
- 6.2 Retention of data is also a key to working efficiency. It becomes all the more important where the published results are challenged by others. Such data should be available for reference and verification purposes for a period of at least five years after completion of the research work or longer if stipulated by the appropriate research body. Data may be stored on space saving techniques, where appropriate (such as a disc or CD-ROM) but it is important that data is retained in an auditable format.
- 6.3 In areas of research where the primary data is of a highly confidential or sensitive nature, the principal investigator may enter into a written agreement with the College and sponsors of the research, to undertake responsibility for storage of the primary data by alternative means and in a secure location outside of College. Any undertaking made by the principal investigator to take personal responsibility for primary data must be deemed acceptable by the ethical stipulations of the discipline's professional body.
- 6.4 In areas of research which include human subjects (e.g. social sciences) there is a need to protect the identity of the individual while still assuring that data can be audited for accuracy. Any such primary data e.g. questionnaires, interview tapes or field notes should be available for review but shall be stored confidentially. The rules and procedures utilised to remove key identifiers for individual subjects should be documented appropriately.
- 6.5 In the event of relocation of principal investigators to other institutions, a written declaration must be made by the principal investigator detailing data which had been obtained during employment at the College and which is required to be removed from the College. The declaration should detail the arrangements for secure retention of the data and how the College may access the data if required for disciplinary auditing or legal verification.

6.6 In addition, the maintenance of data records is increasingly important for the protection of intellectual property.

6.6.1 If data is stored electronically established good practice requires that:

- named computer files that are saved and archived regularly and retrievable in read-only files. Data sets may also be stored securely as hard copy. Any coded information must have documented definitions. The rules for applying the experimental data sets must also be recorded. The names of any computer files/hard copy data sets should be documented appropriately and also cross-referenced to any other records that form part of the research.

6.6.2 In scientific/laboratory-based research it is established practice to record data and procedures as they are observed in:

- permanently bound laboratory/notebooks with consecutively numbered pages. The notebook should either include details of the data, materials and their source and research/statistical methods utilised or provide a clear cross-reference to the source of such information which should also be available as evidence. Such information may include any unique materials that have been prepared or discovered. These should be kept and labelled appropriately and the notebook should include details of their location. In the event of a mistaken entry such information must not be erased or covered out but should be crossed out by a line and initialled by the researcher. Each page of the laboratory/notebooks should be signed and dated by the researcher. The last page of an entry should be counter-signed and dated by another person, confirming that the entries in the notebook have been completed correctly according to any guidelines outlined in each notebook. The counter-signatory is not verifying any of the statements made or that the research has been carried out as indicated in the notebook. The system may be subject to audit from time to time as required by a research council/funding body to ensure that procedures are working efficiently.

7 Responsibility for Publications

Authors of academic and scientific publications are always responsible for their content. So-called 'honorary authorships' are not permissible.

7.1 Other contributions to the work from which the publication arises, including significant ones listed below, are not by themselves regarded as sufficient to justify authorship

- Responsibility for obtaining the funds for the research;
- The contribution of important materials;
- The training of co-authors in certain methods;

- Involvement in the collection and assembly of data;
- Directing an institution or working unit in which a publication arises.

7.2 Where there are a large number of contributors to a piece of research, it may be advisable for an agreement to clarify the authorship and other rights.

8 Responsibility for Integrity of Externally Submitted Research Applications

Principal Investigators and those responsible within College Administration, Departments, Research Centres and Units for authorising external applications are responsible for taking all reasonable measures to ensure accuracy of information included in funding applications.

8.1 The College acting through its officers - primarily through those authorised to sign-off external applications such as, Heads of Departments, the Finance Office and the Research Office - also has a responsibility to ensure that academic and scientific misconduct does not occur.

8.2 In this respect, Departments, Research Centres and Units should also seek to encourage the practice of internal and/or external peer review as appropriate to the subject content, over and above the signing off of applications by the appropriate Head of Department.

9 Standards in Public Life

Attention should also be drawn to the recommendations of the Nolan Committee on Standards in Public Life. The Committee sees higher education as one of the key areas of public life and the seven principles outlined by the Committee have relevance to best practice in the conduct of research, namely: selflessness, integrity, objectivity, accountability, openness, honesty and leadership.

Practical applications of this other than those previously outlined include;

9.1 **Honesty and Integrity:**

Practising strict honesty and integrity in the conduct of every aspect of research, including applications, proposals, analysis of research itself and the presentation and publication of results. Integrity in research requires that all relevant information be reported. It is considered fraudulent to deliberately deceive i.e. to include false information or statements and to omit any data, which may distort the truth. This does not include any honest errors or honest misinterpretation of data/analysis. If it is decided to disregard any data from the published research for a particular reason then this should be detailed appropriately.

9.2 **Maintaining Confidentiality Resulting from Access to Privileged Information:**

Maintaining any confidentiality required as to information gleaned as a result of grant applications or peer review or assessment of research work. Any information gleaned should only be used in accordance with the express wishes or authority of the supplier of the information in a manner which adheres to accepted scholarly practice in the research area.

- 9.3 **Reporting any Conflict of Interest:**
ensuring that any conflict of interest arising from undertaking any research is reported to the appropriate authority. Such conflict of interest may include e.g. personal financial gain which could be gleaned from the research.
- 9.4 **Health and Safety:**
Observing the health and safety regulations as laid down by the College to ensure a safe research environment.
- 9.5 **Legal and Ethical Requirements:**
Observing any legal and ethical requirements as stipulated by the College Ethics Committee, professional bodies and those of recognised research bodies as may be appropriate in the area of research.
- 9.6 **Proper use of resources:**
The monies or other resources allocated for the research must be utilised appropriately in accordance with the requirements of the research body.

Section 2

Dealing with Allegations of Academic and Scientific¹ Misconduct

1 Introduction

1.1 If a case of academic and scientific misconduct arises within the College, the matter will be dealt with by the procedure outlined in Points 4 to 8, overleaf.

1.2 The procedure takes a three stage self-regulatory approach, involving the following stages:

- Preliminary Action - Screening
- An Assessment Stage
- Formal Investigation

The procedure may invoke the College Disciplinary Proceedings in accordance with Statute 14 as a result of the Findings of Stage 3.

1.3 Attention is also drawn to the Public Interest Disclosure Act 1998 which states that employees who disclose information on certain matters in good faith will be legally protected from being disciplined, dismissed or victimised by their employer as a result. Staff who believe there to be a serious case of scientific misconduct are encouraged to use the Public Interest Disclosure 'Whistleblowing' Procedure details of which are available from the Personnel Department.

2 What is Academic or Scientific Misconduct?

In the context of this procedure, the term 'Academic or Scientific Misconduct' includes the following:

- **Fabrication** – the deliberate invention of data
- **Falsification** – the deliberate and selective rejection of undesired results, the distortion of conclusions or misrepresentation of results of other researchers
- **Plagiarism** – the deliberate presentation of documented words or ideas of another as ones own, without attributions or the making use of ideas in breach of confidentiality associated with peer review or supervision;
- **Deception** – the failure to declare a conflict of personal interest or deliberately misleading statements in pursuit of research funding.
- **Interference** – purposely obstructing the progress of research, e.g.
 - by interfering with or damaging any research related property/device of another, which may include apparatus, writings, data, hardware/software produced as a result of research;
 - by withholding/removing such research related property;
- **Collusion** – colluding with or concealing the misconduct of the research work of others e.g. by withholding, falsifying or destroying evidence, providing false testimony;

¹ In the context of this policy 'scientific' is taken to cover all epistemological activity, including for example historical research and other such forms of knowledge generation.

- **Non-compliance** – the wilful failure to comply with research regulations – including safety, codes of ethics - stipulated by the College and/or appropriate research council or body funding the research.

Academic and Scientific Misconduct does not include honest error or honest difference in interpretations or judgements of data.

3 Defamation

It must be born in mind that an allegation of academic or scientific misconduct is serious and potentially defamatory, and therefore could be actionable in law. Consequently, for the protection of the *accuser*² and the party against whom the allegation is made, all enquires (including any formal investigation, if any) should be conducted in strict confidentiality and disclosed only to those persons charged with implementing this procedure.

4 Stage 1 – Initial Assessment / Screening

- 4.1 Initial allegations should be made in writing to 'the Screener' i.e. the appropriate Head of Department or Director of Research, or appropriate line manager in cases where the allegation is against a Head of Department, Research Centre or Unit. The Screener shall immediately consider the allegation to determine whether it falls within the scope of this procedure and whether an assessment is warranted. If the allegation is deemed to be frivolous or without substance, the Screener should dismiss the allegations and inform the *accuser* accordingly. The Screener may seek confidential, legal or other expert advice to assist in such a determination.
- 4.2 If the Screener considers the allegation to require further investigation, the Screener should proceed to Stage 2.

5 Stage 2 – Assessment

- 5.1 The purpose of this stage is to determine whether there is a case to investigate further to the initial allegation, not to reach a final conclusion.
- 5.2 Should the Screener determine that the case warrants further investigation he or she shall inform the Pro-Warden Research who shall then seek confidential, legal or other expert advice to advise him/her, under conditions of strict confidence.
- 5.3 If considered appropriate by the Pro-Warden Research, the *accused* shall be informed of the allegation and given the opportunity to explain any apparent inconsistencies or irregularities which may have become apparent from the receipt of the allegation.
- 5.4 The assessment will be completed as quickly as possible. If it is considered that there is not sufficient substance to the allegations to instigate a formal investigation (Stage 3), then, if applicable, both the *accuser* and the *accused* shall be informed, and the case shall be dismissed.

² Throughout this procedure the terms 'accuser' and 'accused' are used. No usual judicial interpretation is intended by this usage.

6 Stage 3 – Formal Investigation

- 6.1 The purpose of this stage is to examine and evaluate all relevant facts to determine whether academic or scientific misconduct has been committed.
- 6.2 Both the *accuser* and *accused* shall be informed of the intention to move to Stage 3, reminded of the need to maintain confidentiality and to cooperate.
- 6.3 The Pro-Warden Research will then appoint a three person committee. They will appoint their own chair and shall not have any conflicts of interest. They should have the necessary expertise to examine the evidence, interview witnesses and conduct the investigation.
- 6.4 Given the nature of this Investigation Committee, it is important that confidence is maintained to avoid possible defamation and, given the quasi-judicial nature of the procedure, that natural justice is maintained. Advice in this respect may be obtained from the College and others as appropriate.
- 6.5 The Pro-Warden Research will notify the *accused* of the composition of the Investigation Committee and he or she shall have the right to object in writing to any of the persons so appointed. The Pro-Warden Research may then replace the challenged person with a qualified substitute. If the Pro-Warden Research refuses to do so, the reasons for the objection and its overruling shall be part of the investigation report.
- 6.6 The Investigation Committee shall endeavour to conduct the investigation as to retain the confidence of both the *accuser* and the *accused*.

7 Findings

- 7.1 The Investigation Committee will report in writing to the Pro-Warden Research and to the Head of the Department or Centre or Unit concerned (in cases where a Head of Department or Centre or Unit is the *accused*, the references in these paragraphs to Head of Department or Centre or Unit should be taken to be the appropriate line manager).
- 7.2 If the Investigation Committee finds that the allegations of serious scientific misconduct are confirmed, disciplinary action may also be warranted in which case the findings will be dealt with in accordance with the College Disciplinary procedures.
- 7.3 If it is found that misconduct has not occurred but serious scientific errors have been made, the matter will be dealt with internally within the institution, at the direction of the Head of Department or Centre or Unit. Action may be required to correct errors, for example by publication of a retraction, or correction, of data, or information, in the journal where the original work was published. In research involving human participants, the appropriate research ethics committees shall be informed.
- 7.4 If it is found that no misconduct has occurred, steps should be taken to preserve the good reputation of the researcher, and in any event to protect the complainant from any adverse repercussions (save where the complaint has been made maliciously).

8 Malicious Allegations

Should the Pro-Warden Research determine that the allegation(s) is (are) malicious he or she may recommend appropriate disciplinary action.

References and Acknowledgements

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