Research integrity

Department of Materials – induction session

Kathryn Dally
Assistant Registrar (Research Services)

22 January 2014
What is research integrity?

Also known as research ethics, good practice in research or the responsible conduct of research.

It includes:

- the use of honest and verifiable methods in proposing, performing, and evaluating research
- reporting research results with particular attention to adherence to rules, regulations, guidelines, and
- following commonly accepted professional codes or norms.
Research integrity or the ‘responsible conduct of research’ - areas covered include:

- Collaborative research
- Conflict of Interest
- Data Management
- Health and safety
- Intellectual Property
- Mentoring / Supervision
- Peer Review
- Publication and Authorship
- Research misconduct
Researchers must be able to exercise freedom in their academic choices, and must also accept responsibility for the decisions they make.

Thus, the primary responsibility for ensuring that they act according to these principles in all aspects of their research work, including peer review, lies with the individual.
Concordat principles

- **Honesty** in all aspects of research, including in the presentation of research goals, intentions and findings; in reporting on research methods and procedures; in gathering data; in using and acknowledging the work of other researchers; and in conveying valid interpretations and making justifiable claims based on research findings.

- **Rigour**, in line with prevailing disciplinary norms and standards: in performing research and using appropriate methods; in adhering to an agreed protocol where appropriate; in drawing interpretations and conclusions from the research; and in communicating the results.
Concordat principles

- **Transparency and open communication** in declaring conflicts of interest; in the reporting of research data collection methods; in the analysis and interpretation of data; in making research findings widely available, which includes sharing negative results as appropriate; and in presenting the work to other researchers and to the general public.

- **Care and respect** for all participants in and subjects of research, including humans, animals, the environment and cultural objects. Those engaged with research must also show care and respect for the stewardship of research and scholarship for future generations.

- **Research misconduct**. To be dealt with appropriately, while recognising that mistakes and honest errors can be made in any field of human endeavour.
Research misconduct

- University of Oxford defines misconduct as:
  - fabrication, falsification, plagiarism, or deception in proposing, carrying out, or reporting results of research
  - deliberate, dangerous or negligent deviations from accepted practice in carrying out research
  - failure to follow an agreed protocol if this failure results in unreasonable risk or harm to humans, other vertebrates or the environment
  - facilitating of misconduct in research by collusion in, or concealment of, such actions by others
Other potential problem areas

Irresponsible research practices:

- **Authorship and contributions**, incl.
- Omitting those who have contributed appropriately to the work, or listing authors without their permission
- Attribution of work to others who have not contributed to the research
- Lack of appropriate acknowledgment of work produced by a research student, trainee or associate in the course of their employment
Other potential problem areas

- Misrepresentation of findings and data
- Dishonest, manipulative and/or selective use of information
- Delivering by manipulation of the project or reports the results that the sponsor expects or requires

“You are completely free to carry out whatever research you want, so long as you come to these conclusions.”
Other potential problem areas

- Inaccuracy and carelessness in record keeping or in the preparation of grant applications or publications
- Failure to declare, avoid or manage **conflicts of interest**, incl. those situations where a conflict of interest might reasonably be perceived to exist
Promoting good research conduct at Oxford

Academic Integrity in Research: Code of Practice and Procedure

Statement of Principle

1. The University expects all members of the University including staff and students, and those who are not members of the University but who are conducting research on University premises or using University facilities, to observe the highest standards in the conduct of their research. In pursuance of such high standards, it is expected that they shall:

(a) take steps to acquaint themselves with available guidance as to 'best practice' whether in relation to matters of research policy, finance or safety relevant to their area of research; for example, the statement "safeguarding good scientific practice" published by the Director General of the Research Councils and the Chief Executives of UK Research Councils in December 1998;

(b) observe such legal and ethical requirements as are laid down by the University or such other properly appointed bodies as are involved in their field of research;

(c) take steps to secure the safety of those associated with the research;

(d) report any conflict of interest, whether actual or prospective, to the appropriate authority;

(e) observe fairness and equity in the conduct of their research.

2. Failure to comply with the code may give rise to an allegation of misconduct. Misconduct in research may be ground for disciplinary action, and if serious, for dismissal or expulsion.

Definition of misconduct

3. Misconduct for the purpose of this code means the fabrication, falsification, plagiarism, or deception in proposing, carrying out, or reporting results of research, and deliberate, dangerous or negligent deviations from accepted practice in carrying out research. It includes failure to follow an agreed protocol if this failure results in unnecessary risk or harm to humans, other vertebrates or the environment, and facilitating of misconduct in research by collusion in, or concealment of, such actions by others. It also includes any plan or conspiracy or attempt to do any of those things. It does not include honest error or honest differences in interpretation or judgement in evaluating research methods or results, or misconduct (including gross misconduct) unrelated to research processes.

Responsibility

4. All members of the University, and individuals permitted to work in University institutions, have responsibility to report any incident of misconduct, whether this has been witnessed, or is suspected. Suspicions reported in confidence and in good faith will not lead to disciplinary proceedings against the person making the complaint. In the event, however, of a malicious allegation, appropriate action will be taken.

http://www.admin.ox.ac.uk/ps/staff/codes/air.shtml
Research integrity and ethics

The University of Oxford is dedicated to the highest standards of research integrity. As set out in its Academic Integrity in Research: Code of Practice and Procedure, it expects all members of the University including staff and students, and those who are not members of the University but who are conducting research on University premises or using University facilities, to observe the highest standards in the conduct of their research.

This website provides links to the relevant University policies, guidelines and procedures which are intended to promote the responsible conduct of research in the University’s ongoing research activities.

- Conflict of interest
- Research Data Management (external site)
- Human participants in research
- Publication and authorship
- Research misconduct
- Collaborative research
- Peer review
- Intellectual Property
- Mentoring

http://www.admin.ox.ac.uk/researchsupport/integrity/
Practical suggestions ...

- Discuss authorship standards from the outset (and review regularly in the course of a project)
- Agree how research data will be managed, (collected, stored, access provided etc.)
- Training (online, in-person etc)
- Refer to web-based guidance
- Make use of peer review (assess each others’ data, review draft publications, grant applications etc.)
- Don’t ignore problems. Discuss or raise concerns
Training / further resources

- Online Research Integrity training available from
  - http://www.admin.ox.ac.uk/researchsupport/integrity

- Mathematical, Physical and Life Sciences Divisional Skills Training
  - http://www.mpls.ox.ac.uk/learning/training-research-staff

- Oxford Learning Institute
  - http://www.learning.ox.ac.uk/

- US Office of Research Integrity
  - http://ori.dhhs.gov/
Thank you

kathryn.dally@admin.ox.ac.uk