2. Research Practice

Principles of Good Research Practice

Northumbria University strives to uphold the highest standards of ethical practice in research and academic integrity. Irrespective of the nature and ethical complexity of a research project, staff and students are expected to ensure that their conduct is driven by the ethical imperative of respect, the intent to do no harm and to contribute to society’s knowledge and practice through engagement in research that has beneficent intent.

To achieve a high quality research culture, the following key elements are promoted:

- Respect for the dignity, rights, safety and well-being of participants and researchers
- Valuing diversity in society
- Personal and scientific integrity
- Leadership
- Honesty
- Accountability
- Openness
- Clear and supportive management.

To achieve this, and in line with meeting its responsibilities as a sponsor of research (DH Research Governance Framework for Health and Social Care 2nd edition 2005), the University is responsible for:

- Compliance with all current employment, equality and diversity, and health and safety legislation
- Demonstrating the existence of clear codes of practice for staff, and mechanisms to monitor and assess compliance
- Ensuring that investigators and other research staff are aware of, understand and comply with appropriate governance frameworks
- Demonstrate systems of continuous professional development of staff at all levels
- Having agreements and systems to identify, protect and exploit intellectual property
- Ensuring that they are able to compensate anyone harmed as a result of negligence on the part of staff, students and others for whom they have liability; and, if they have agreed to do so, to compensate participants for non-negligent harm arising from research
- Having systems in place to detect and address fraud, and other scientific or professional misconduct by staff
- Having systems to process, address and learn lessons from any errors or complaints brought against their employees
- Permitting and assisting in any statutory inspection, audit, or investigation arising from errors or complaints associated with their employees

Further guidance and practice in this area can be found in the UK Research Integrity Office Code of Practice here.

World Conferences on Research Integrity

The World Conferences on Research Integrity Foundation (WCRIF) was established in July, 2017, as a non-profit organization with official seat in the municipality of Amsterdam, The Netherlands. The purposes of the World Conferences on Research Integrity Foundation (WCRIF) includes:

- promote the continuation of the World Conferences on Research Integrity;
- ensure organizational continuity between conferences;
- maintain a World Conferences on Research Integrity website; and
- publish or disseminate guidance or policies agreed to at World Conferences on Research Integrity

Further details can be found here.
The **Singapore Statement on Research Integrity** is the outcome of the 2nd World Conference on Research Integrity, held 21-24 July 2010.

The four principles of responsible research set out in the statement are

- Honesty in all aspects of research
- Accountability in the conduct of research
- Professional courtesy and fairness in working with others
- Good stewardship of research on behalf of others

Further information can be found [here](#).

The **Montreal Statement** on Research Integrity in Cross-Boundary Research Collaborations is the outcome of the 3rd World Conference on Research Integrity held 5-8 May 2013.

The statement offers guidance on integrity in cross-national, cross-disciplinary and cross-sector research. Research collaborations that cross national, institutional, disciplinary and sector boundaries are important to the advancement of knowledge worldwide. Such collaborations present special challenges for the responsible conduct of research, because they may involve substantial differences in regulatory and legal systems, organizational and funding structures, research cultures, and approaches to training. It is critically important, therefore, that researchers be aware of and able to address such differences, as well as issues related to integrity that might arise in cross-boundary research collaborations. Researchers should adhere to the professional responsibilities set forth in the Singapore Statement on Research Integrity in addition to addition responsibilities detailed [here](#).

The **Amsterdam agenda** is the outcome of the 5th World Conference in Research Integrity held 28-31 May 2017.

The aim was the greater emphasis on the assessment of efforts to improve integrity in research and the use of empirical information in developing research integrity policies. To achieve a “Registry for Research on the Responsible conduct of Research” (RRRCR) will be established. The RRRCR will seek to encourage researchers to plan, conduct, report and share their research around six key elements which are detailed [here](#).

**Authorship Contribution Principles and Guidelines for Research Publications**

**Context**

The term ‘authorship’ has a number of connotations in the academic context (for instance, in relation to intellectual property or copyright). This policy only applies to authorship in terms of the contribution made to publications as outlined in section 2 below.

**Policy Environment**

Guidelines on what constitutes authorship and appropriate accreditation are accepted as a key part of good research practice. Further information and guidance on good practice can be found in the [UK Research Integrity Office (UKRIO) Code of Practice for Research](#).
Authorship Principles and Guidelines

Those involved in authoring research publications are expected to adhere to the principles and guidelines below:

- Responsibility for determining authorship lies with those who carried out the work

- In the absence of discipline-specific or funder criteria, the definition of an author will be those who meet all of 1-3 of the ICMJE criteria below and (in relation to the fourth criterion) understand and be prepared to take public responsibility for the portion of research that they contributed.
  - Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
  - Drafting the work or revising it critically for important intellectual content; AND
  - Final approval of the version to be published; AND
  - Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Researchers should be aware of practices within their own disciplines, and abide by any stipulations laid down by funders or journals. Where different criteria to the ones above are used researchers should be able to clearly explain and robustly justify their criteria to others outside their discipline.

- Authorship should be discussed at an early stage and throughout the project, to agree those to be listed as authors and those whose work will be acknowledged. The discussion should include consideration of the ordering of author names (practice varies between disciplines). Every author should be able to explain the author sequence.

- No researcher meeting the agreed authorship definition should be excluded.

- No researcher not meeting the agreed authorship definition should be included.

- The following, by themselves, do not normally justify authorship:
  - securing research funding;
  - providing space;
  - collecting research data;
  - managing or supervising researchers involved in a project. Supervisors of research projects should refer to points 1-3 of the authorship definition.

- Where journal and discipline conventions allow, a description or statement of the contribution of each author should be included in the publication.

- The work of those who do not meet the authorship criteria but have contributed or collaborated on the research should be properly acknowledged. Specifically, where the research has been supported by any funding (e.g. UKRI, industrial partner) this must be acknowledged.
  - Contributions could include technical help, data collection, data analysis, funders, communities, sponsors and advisers. The nature of the contribution (e.g. scientific adviser, collected data) should be specified.

- Other previously published research on which the current research is based must be properly acknowledged.
Responsibilities
The Lead Author is responsible for ensuring that authorship issues are discussed and communicated, and that any changes are notified in a timely manner. Written records of authorship decisions, including written declarations from all authors, should be kept. Where there are co-authors, one individual should be nominated to take this responsibility. The Lead (or designated) author should seek verification from each of the authors that they:
  ▪ have reviewed the content of the publication;
  ▪ can confirm that their area of expertise is accurate to best of their knowledge;
  ▪ agree with, and understand, the author ordering;
  ▪ take responsibility for their own contribution.

In the case of an authorship dispute, the lead author should attempt to resolve this informally in the first instance (see below).

Dispute Resolution
Where there are disputes over authorship, it is the responsibility of the institution(s) involved to resolve.
The Lead Author will initially seek resolution informally liaising with the parties involved. In the event that the issue cannot be resolved informally (or if the issue involves the Lead Author) the relevant Faculty Associate Pro Vice-Chancellor (Research and Innovation) will arbitrate in the first instance. Where there is any potential conflict of interest, the matter will be referred to the Chair of Research Ethics Committee, or to the Faculty Associate Pro Vice-Chancellor (Research and Innovation) as appropriate.

Source: Approved by Research and Innovation Committee: May 2016 To be reviewed: July 2019