

Keele University's Annual Statement on Research Integrity 2019-20

Introduction

Research integrity is one of the strategic pillars of Keele University's overarching [Research Strategy 2020](#). Our commitment is to the highest standards of research integrity through maintaining a research environment that supports and develops our researchers, with clear processes for responding to allegations of research misconduct.

The [Named Person](#) responsible for research integrity and reproducibility at Keele University is the Pro-Vice Chancellor for Research and Enterprise who is the first point of contact for further information or support about matters of research integrity and reproducibility. Alternatively, the Academic Lead for Research Integrity and Improvement at Keele University and the Head of Project Assurance (Research Integrity administrative lead) can be contacted. This Research Integrity Group can be contacted through the dedicated email account: research.integrity@keele.ac.uk.

Statement

Keele University is committed to ensuring the highest standards of research integrity in all aspects of its research activities and expects its researchers to maintain a similar commitment. Keele University welcomes the [UUK Concordat to Support Research Integrity](#) and supports the five commitments contained within the Concordat.

Quality Management System

The University recognises the need to ensure standards and legislative requirements are met in a consistent and robust manner. The University has a Quality Management System in place to manage compliance with the standards governing our research activity. This Quality Management System comprises three main aspects:

- (1) the University's **policies and procedures** to define the standards and outline processes by which those standards are applied;
- (2) the **training and development** of research staff, to support them in applying and promoting these standards in their research; and
- (3) processes and mechanisms by which the University maintains **oversight** of the ongoing application of these standards and investigates concerns about research integrity.

The five key elements of research integrity (honesty, rigour, transparency and open communication, care and respect, and accountability) outlined in the Concordat are reflected in the University's Quality Management System.

Policies and Procedures

A new [Keele University Research Integrity Policy](#) was approved and established as part of the Quality Management System in AY 2019-20. The University has a [Code of Good Research Practice](#) and a [Code of Practice for Student Academic Misconduct](#) which outline the University's expectations of the behaviour of all staff and students engaged in research. These documents also include the definition of misconduct in research. The code reflects a number of other policies including:

- Data protection
- Management of conflicts of interest
- UK Policy Framework for Health and Social Care Research
- Research data management
- Research ethics

Where an area of work represents a significant risk or there is otherwise a requirement for it, the University will specifically describe processes required to meet standards or legislative requirements through standard operating procedures (SOPs). SOPs are subject to periodic review to reflect changes in legislation, regulatory and funder requirements as well as evolving research practice. Currently, the University has SOPs in the following areas:

- Clinical research, particularly Clinical Trials of Investigational Medicinal Products
- Scientific research involving the use of animals
- Research involving human participants, their data or bodily material
- Open Access to research publications
- Ethics Committee review of research

These policies are reviewed on a regular basis to ensure they meet the requirements of our evolving research portfolio and can be found on the [University's Research Integrity webpages](#) and [Policy Zone](#). Communications on research ethics and integrity processes are made to staff and students through the University's internal communications channels. Research integrity is a standing item on the University and Faculty Research Committees.

In addition to this, Faculties are encouraged to develop local processes to promote a culture of research integrity; these may include:

- Peer review processes
- Symposium/Seminar series and academic discussion
- Engagement with research transparency, including (but not limited to):
 - Pre-registration of study protocols
 - Open access to research data
 - Open access to research materials
 - Open access to research software / analysis scripts
- Ethics Committee review of research

Keele is committed to the principle that researchers should publish their results freely, ensuring their work is available to other researchers and the public. The University proactively publishes publicly-funded research outputs through its [research repository](#), and actively manages situations where restrictions exist on publication accessibility. Currently, around 82% of the content on the repository is freely available to all through open access publication.

The University also has a [repository for research data](#) underpinning published research made available for open access. It builds on and greatly facilitates existing good practice within the University as highlighted by key stakeholders in recent publications.

Keele is committed to supporting transparency in research and to developing approaches to improve the quality of the research we produce. As part of this, Keele has developed a Statement on Transparency in Research which sets out key expectations of Keele researchers to engage with Open Science and Reproducibility best-practice. Such best practice includes Open Data (public sharing of data underpinning our publications), Open Materials (public sharing of research methods / analysis scripts / software) underpinning our research, as well as engaging in pre-registration of study protocols and analysis plans, where appropriate.

Keele is also committed to recognising and rewarding engagement with Open Science and Reproducibility best practices in its promotion and hiring decisions. Our new promotions criteria encourage candidates to comment on their engagement with Open Science and Reproducibility best-practice in their applications. Keele has also developed a Statement on Responsible Research Assessment to guide hiring and promotion committees in the responsible use of bibliometric data. Keele is also a signatory of the San Francisco Declaration on Research Assessment (DORA) which emphasises the assessment of research on its own merits rather than relying on bibliometric data (such as journal impact factor).

Training and Development

The University recognises that the ultimate responsibility for personal and professional development of researchers lies with the individual and provides a supportive environment with open access to opportunities for training or personal reflection. The University benefits from membership of Vitae and the UK Council for Graduate Education (UKGCE) and benchmarks development opportunities against the Researcher Development Framework in order to develop more effective and successful researchers with a specific emphasis on research integrity.

The University seeks to ensure that all researchers are aware of and understand the policies and principles relating to ethics and integrity. The University supports researchers through the provision of learning and development opportunities to ensure compliance with policy in mandating training in certain key areas.

The training programme provides opportunities for recommended training in areas supporting research integrity such as:

- Good Clinical Practice as legislated by the Medicines for Human Use (Clinical Trials) Regulations
- Data Protection Act and Freedom of Information Requests
- Discipline specific research methodology and ethical considerations
- Publications and presentations
- Intellectual Property management including conflicts of interest and transparency
- Animals (Scientific Procedures) Act
- Human Tissue Act
- Plagiarism and Research Misconduct
- Information Security

The University recognises the need for a flexible and dynamic training package to respond to changes in research focus in the staff and student populations, as well as external forces such as changes in legislation or funder requirements.

The University's research integrity training needs are held under review by the Research Committee.

The [Research Governance Toolkit Research Integrity webpage](#) has been updated.

Research integrity training is available to postgraduate research students. As part of the PGR Summer School an introductory session on, integrity, research governance and ethics explains the differences between the three and when each is relevant along with real-time examples and support for students to think about their own projects.

An Academic Lead for Research Integrity and Improvement is now in post at Keele along with Faculty Research Integrity Champions for each Faculty. These individuals will work with the Pro-Vice Chancellor for Research and Enterprise and the Head of Project Assurance to foster a stronger culture of research integrity and reproducibility at Keele. The Academic Lead and Faculty Research Integrity Champions are members of the Research Leaders Network at Keele and their respective Faculty Research Committees.

Key speakers in the field of research integrity and reproducibility, including Prof Marcus Munafò (Reproducibility) and Prof Leanne Hodson (Research Culture), have given seminars as part of the university-wide Research Talks series, attended by academic staff, postgraduate taught and research students, undergraduate students and professional services staff. The talks were recorded and will be made available to all staff and students through an online Research Integrity and Reproducibility forum that is in development.

Governance and Oversight

Keele University's [Research Committee](#) oversees the integrity of the University's research on behalf of the University Executive Committee, [Senate](#), and [Council](#), and will review and approve this statement.

Research Misconduct

The University provides assurance that the processes in place for dealing with allegations of misconduct are transparent, robust and fair and that they are appropriate to the needs of the organisation. The University has a policy for the investigation of allegations (LINK) of research misconduct which is currently under review following the release of the revised concordat to support research integrity.

Research Misconduct Investigations

	Number of informal investigations completed					Number of formal investigations completed					Number of allegations upheld (in whole or part)				
	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Fabrication	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Falsification	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plagiarism	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Failure to meet legal, ethical and professional obligations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mis-representation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Breach of duty of care	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Improper dealing with allegations of misconduct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

Table 1 - Summary of investigations into allegations of research misconduct. Informal investigations are those that were received and upon review of the details and evidence it was decided that a formal review was not appropriate and that the Faculty Dean for Research would meet with the individual(s) involved and provide support and mentorship. Formal investigations involve a panel to review the allegation and decide on appropriate outcomes.

Future Developments

During the 2020-21 academic year, the Pro-Vice-Chancellor for Research and Enterprise, the Academic Lead for Research Integrity and Improvement, the Faculty Research Integrity Champions and the Head of Project Assurance will work together to deliver the following:

Maximise the Visibility of Research Integrity & Improvement Agenda

We will officially launch our Research Integrity & Improvement agenda towards the end of 2020.

We have a schedule of internal and external speakers who will provide regular colloquia addressing research integrity & improvement matters. These colloquia will be attended by research and support staff and students across the University, and—where permission is granted—will be recorded and placed as training resources on the Keele Research Integrity webpages. Regular communications will be sent through the University staff communication channels about associated events.

We also ensure the Research Integrity & Improvement Agenda has visibility at all key Research Leadership Committees. Faculty Research Integrity Champions sit on Research Committees in each Faculty, and the Named Person responsible for Research Integrity chairs the University Research Committee, which the Head of Project Assurance also attends.

Enhancing Engagement with Open Science

A primary focus of the 2020/21 academic year will be working to enhance engagement with Open Science practices across the University. We will be working to maximise the public sharing of data and materials underpinning publications from our research staff and students (i.e., engagement with Open Data and Open Materials), as well as the engagement with pre-registration of study protocols (where appropriate).

Identification of Faculty-Specific Research Integrity Priorities

Having recruited Faculty Research Integrity Champions, it will be important to conduct work to establish faculty-specific research integrity challenges and priorities across a range of disciplines and methodologies. Not all University-wide initiatives will be a “one-size fits all” solution, so it will be important to tailor initiatives to the individual faculties (and to develop some faculty-specific initiatives).

Training

Provide research integrity & improvement training at all levels of research staff and PGR students across the University. We will work closely with the newly established Keele Doctoral Academy to establish training material and associated workshops on key issues surrounding research integrity. This training—coupled with the visibility of research integrity at key research leadership committees—will assist the building of a research integrity-literate culture both from the bottom-up (via the training) and top-down (via research leadership committees).

Research Misconduct Procedure

A review and update will be conducted of this procedure.