

Self-Assessment Tool for The Concordat to Support Research Integrity

Version 2.0

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Introduction

Aim

This self-assessment tool has been developed to help institutions identify areas of their research practices, systems and policies, researcher development and monitoring that may need to be revised in order to adhere to the requirements and recommendations of The Concordat to Support Research Integrity (2019). While the Concordat addresses three key stakeholders involved with research - the researcher. employer and funder - this self-assessment tool focuses on the responsibilities of institutions that employ researchers.

All involved in research must meet the highest standards of good practice and ethical conduct. Research integrity is an inherent part of professional conduct. It goes beyond meeting regulatory and contractual requirements. The Concordat recognises this and was not created to encourage a 'tick box' approach to these issues. Accordingly, UKRIO believes strongly that individual and institutional responses to the Concordat should not focus solely on fulfilling statutory, contractual and other obligations. While these obligations must be met, the aim should be the broader implementation of the Concordat and its overarching Commitments.

This self-assessment tool will allow institutions to consider how they might carry out such a broad implementation, building on their existing activities, in order to fulfil the Concordat's aim of improving research integrity and also to meet the specific institutional responsibilities listed within each of its Commitments. Particular attention has been paid to areas where UKRIO has most often been approached for guidance, in the hope of passing on lessons learned to the research community.

Use of the self-assessment tool will not only help with the implementation of the Concordat, but also enhance an institution's overall approach to research integrity and help ensure that important issues have not been overlooked, not least the minimum requirements set by the Concordat Signatories (see page 5; correct as of August 2021).

Thematic approach

The Concordat sets out five high-level commitments which all involved in research must meet. Rather than repeat the Concordat, it is recommended the Concordat is read alongside this tool. This document identifies five key themes which cut across those commitments. Taking each of these key themes in turn, this document poses self-assessment questions for institutions, each mapped onto one or more commitments of the Concordat (summarised in the next section). For each question, this document also introduces practical ways in which they might be met under the heading 'possible evidence'.

This approach groups related issues together, allowing a focus on strong recommendations and broad areas for action. It also reduces duplication, as there is a degree of overlap between the broad commitments of the Concordat.

Advisory, not prescriptive

A national, high-level framework such as the Concordat must be implemented with regard to local research environments and conditions. Our aim is not to suggest a 'one size fits all' approach or to prescribe inflexible solutions. Rather, we hope that this selfassessment tool will help institutions consider how the revised Concordat can best be implemented in their particular settings, and how it might be used to promote and sustain research integrity.

Introduction

An opportunity for review and reflection

The Concordat was developed to sustain and enhance the integrity of UK research in the long term, and to make current institutional assurance more visible. Both the 2012 and 2019 editions build upon existing standards and guidance for research practice and, consequently, much of what the Concordat says may appear familiar. However, organisations should not assume that they are already adhering to its commitments.

Not only does the revised 2019 Concordat contain new requirements and expectations, but UKRIO has observed that there can often be gaps in existing institutional provisions for research integrity. Institutions might fall short of meeting certain standards or lack information on whether all of their provisions are effective. In our experience, a strong professional ethos drives most research in the UK but it is important to sustain and improve this. The research community must work together to safeguard and enhance good research practice in the long term, support a heathy research culture, and correct systemic problems and negative incentives.

Institutions must satisfy themselves that their existing measures are effective. The Concordat also provides institutions with an opportunity to consider how these measures might be built upon, to ensure a more visible and joined-up approach to supporting research integrity.

Safeguarding and enhancing research integrity is a process, especially when addressing matters such as strategic and operational leadership and ensuring a healthy research culture. Even institutions with a longstanding and comprehensive approach to research integrity can benefit from reflecting

periodically on what they do and how it can be improved.

Annual statement

The final commitment of the 2019 Concordat requires that institutions make an annual statement on research integrity to their governing body. It also requires that this statement be made public. Previously these had only been recommendations.

A section of this Self-Assessment Tool discusses what might be included in the annual statement. It is intended as a guide to inform the drafting of an annual statement, rather than instructions that 'must' be followed. It is up to institutions to determine what their statements will contain.

A 'living document'

As organisations develop their research practices to implement the Concordat, and funding bodies develop processes to assess the extent to which institutions have engaged with the concordat and implemented its requirements, we expect this self-assessment tool to evolve. The intent is that it will be a 'living document', subject to periodic review and revision to reflect: emerging best practice in this area; any updates made to the Concordat itself; new initiatives relating to research integrity, such as the establishment of the UK Committee on Research Integrity, and research culture; and wider changes to the way research is conducted, for example as a result of the COVID-19 pandemic. UKRIO welcomes feedback on the content and use of this document.

Please submit any comments or suggestions via our website www.ukrio.org.

Footnote to the second edition

Revision of The Concordat to Support Research Integrity

On 25 October 2019, the Concordat Signatories Group published a revised edition of The Concordat to Support Research Integrity.

UKRIO sees this revision of the Concordat as an important step in safeguarding and improving standards in UK research, as research quality is inextricably linked to research integrity.

Responding to an inquiry by the House of Commons Science and Technology Committee, the revised Concordat clarifies what is required from researchers, employers of researchers and funders of research to help ensure that the highest standards of rigour and integrity are maintained.

UKRIO holds an Observer role on the Concordat Signatories Group and the updated Concordat was developed with the assistance of our unique expertise and experience. We will continue to work with the signatories of the Concordat to help implement its requirements and provide feedback to inform its future development.

A revised Self-Assessment Tool

This second edition of UKRIO's Self-Assessment Tool for The Concordat to Support Research Integrity provides guidance for the implementation of the revised Concordat to Support Research Integrity (2019), taking as a starting point UKRIO's first edition of this Self-Assessment Tool (2014).

This new edition of the Self-Assessment Tool includes:

A summary of changes to the second edition of the Concordat and the minimum compliance

- standards required by the Concordat Signatories (see page 5; correct as of August 2021).
- Updated self-assessment tables, reflecting the new content and requirements of the 2019 edition of the Concordat.
- New discussion on the implementation of the Concordat and avoidance of a 'tick box' approach.
- **Expanded discussion** of the content of institutional annual statements on research integrity.
- An Appendix setting out a comparison of key elements of the 2012 and 2019 editions of the Concordat, including the changing responsibilities of researchers, employers and funders, and of key definitions used in the two editions.

If you would like our support in meeting the requirements of the revised Concordat and embedding its Commitments in the systems and practices of your research or your organisation please contact us.

An independent perspective

Please note that this self-assessment tool was developed independently by UKRIO. It does not necessarily represent the views of the Concordat's authors or signatories, nor is it endorsed or warranted by them and/or their employers.

The 2019 Concordat: an overview

While retaining the overall structure of the first edition - the five commitments of research integrity - the 2019 edition of the Concordat has changed considerably from the previous edition. This section provides a brief outline of the key changes, including to the definition of 'research integrity', while an appendix discusses them in more detail, as well as providing comparison tables for important elements of the 2019 Concordat and its 2012 predecessor.

For obvious reasons, the best way to understand the changes and new provisions of the revised Concordat is to scrutinise it carefully. UKRIO recommends careful consideration of the 2019 edition of the Concordat, which can be accessed via Universities UK's website.

Key features of the 2019 Concordat

The Concordat was revised in response to a recommendation by the House of Commons Science and Technology Committee in 2018 that "...the signatories update and strengthen the Concordat by making the requirements and expectations clearer."

Accordingly, existing provisions of the Concordat have been reinforced, with responsibilities that were described as recommended or optional in the first edition are now mandatory requirements. For example, it is now compulsory for employers of researchers to submit an annual institutional statement on research integrity to their governing body and for that statement to then be made public.

Existing responsibilities listed for researchers and employers of researchers have been revised to reflect lessons learned since the 2012 edition and new responsibilities added for both groups. Responsibilities for funders of research have been similarly revised and expanded, somewhat more so

than for the other two groups.

The definition of research integrity has been revised, including the addition of a new element, 'Accountability', to take into account developments in the field of research integrity since 2012. The definition of research misconduct has also been updated, to provide a more robust basis for addressing concerns about alleged misconduct, and to be more aligned with requirements from funding bodies and recommendations from UKRIO since 2012. Institutions should consider the implications of

The first edition of the Concordat was devised with a strong focus on higher education institutions and this focus remains to a certain degree in the new edition. However, it is the Signatories' intent that the 2019 Concordat will be applicable to any type of research organisation. This is reflected in the drafting of the new edition, which explicitly recognises that implementation of the Concordat will vary across different types of research organisation.

the changes for their policies and procedures.

The revised Concordat also assigns key responsibilities to the Concordat Signatories themselves, namely:

- Publishing an annual statement summarising the work of the Concordat Signatories (and the higher education sector) on research integrity.
- Convening an annual research integrity stakeholder forum.
- Reviewing the Concordat every five years.

Comparing the two editions of the Concordat

The 2019 edition of the Concordat was edited throughout for clarity of language. As a result, a

The 2019 Concordat: an overview

comparison of the entire texts of the two documents is of limited value and could be misleading.

As noted earlier, UKRIO recommends careful consideration of the 2019 edition of the Concordat, which can be accessed via Universities UK's website. To supplement such scrutiny of the 2019 edition, the appendix of this self-assessment tool compares the 2012 and 2019 versions of the following key elements of the Concordat:

- Definition of research integrity (repeated on the following page of this document).
- Definition of research misconduct.
- Specific responsibilities required of researchers.
- Specific responsibilities required of employers of researchers.
- Specific responsibilities required of funders of research.

In the appendix and on the following page, the shaded text in the 2019 version indicates where text was added and/or replaced compared to the 2012 version.

Commitment to the new Concordat and period of implementation

Employers of researchers must demonstrate their commitment to the 2019 edition of the Concordat by 25 October 2020. By that time they must, according to the Universities UK website, have as a minimum:

- Identified a named point of contact who will act as a first point of contact for anyone wanting more information on matters of research integrity and ensured that contact details for this person are kept up to date and are publicly available on the institution's website (page 11 of the Concordat).
- Provided a named point of contact or a recognised and appropriate third party to act as confidential liaison for whistle-blowers or any other person wishing to raise concerns about the integrity of research being conducted under their auspices (page 14 of the Concordat).
- Published an annual statement on how they are meeting the requirements of the revised concordat (page 16 of the Concordat).

As well as requirements set by the Concordat Signatories as a group (including not only the above but the Commitments and other responsibilities listed in the Concordat), individual Signatories and other bodies will have particular interest in the implementation of specific areas of the Concordat', for example as part of the terms and conditions, or related policies, of research funding.

UKRIO recommends careful and regular scrutiny, of both the Universities UK website and the research integrity and related policies of funders, to ensure that institutions are aware of any changing requirements.

The 2019 Concordat: an overview

Definition of research integrity: comparison of the first and second editions of the Concordat

2019 (current) edition	2012 (previous) edition
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.	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, and 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.	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.
Transparency and open communication in declaring potential competing interests; in the reporting of research data collection methods; in the analysis and interpretation of data; in making research findings widely available, which includes publishing or otherwise sharing negative or null results to recognise their value as part of the research process; and in presenting the work to other researchers and to the public.	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 research, and for the subjects, users and beneficiaries of research, including humans, animals, the environment and cultural objects. Those engaged with research must also show care and respect for the integrity of the research record.	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.
Accountability of funders, employers and researchers to collectively create a research environment in which individuals and organisations are empowered and enabled to own the research process. Those engaged with research must also ensure that individuals and organisations are held to account when behaviour falls short of the standards set by this concordat	Note: Accountability was a new section to the 2019 edition.

Five themes of the Concordat

This document identifies five key themes, colourcoded in the tables that follow, which cut across the commitments of the Concordat, grouping related issues together and allowing a focus on strong recommendations and broad areas for action.

The five key themes we have identified in the Concordat are:

- 1. Policies and systems
- 2. Communication
- 3. Culture, development and leadership
- 4. Addressing research misconduct
- 5. Monitoring and reporting

Taking each of these key themes in turn, this document poses self-assessment questions for institutions, each mapped onto the relevant

commitments of the Concordat. For each question, the document also introduces practical ways in which they might be met under the heading 'possible evidence'.

As noted in earlier, this self-assessment tool should not be seen as prescriptive but as a guide to inform the implementation of the Concordat. It is up to employers and their researchers to determine the best way to do so in their particular research environment.

It should also be noted that the 'possible evidence' is for use by institutions as part of the self-assessment process. It is **not** suggested that this level of information must be collated and provided to external bodies. Rather, it can be used to inform institutional statements on the implementation of the Concordat and, indeed, other internal and external requirements for assurance about research integrity.

Summary of the Concordat's five commitments (2019 edition)

- 1. **Maintaining the highest standards:** We are committed to upholding the highest standards of rigour and integrity in all aspects of research.
- 2. **Ethical, legal and other frameworks:** We are committed to ensuring that research is conducted according to appropriate ethical, legal and professional frameworks, obligations and standards.
- Research culture: We are committed to supporting a research environment that is underpinned by a
 culture of integrity and based on good governance, best practice and support for the development of
 researchers.
- 4. **Dealing with research misconduct:** We are committed to using transparent, timely, robust and fair processes to deal with allegations of research misconduct when they arise.
- 5. **Strengthening research integrity:** We are committed to working together to strengthen the integrity of research and to reviewing progress regularly and openly.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
Maintaining the highest standards Ethical, legal and other	Do you have an institutional policy for research integrity?	Relevant policy or policies.Publicly accessible web link to policy or policies.
frameworks		
4. Dealing with research misconduct		
1. Maintaining the highest standards	Do the research integrity policy and other related policies include:	 Relevant sections of research integrity policy or related policies.
2. Ethical, legal and other frameworks	 Principles which describe the values and responsibilities relevant to research? 	
4. Dealing with research misconduct	 Standards required for the conduct of research, also known as accepted or 'good' practice? 	
	 A definition of research misconduct and all other unacceptable research practices? 	
1. Maintaining the highest	Does the research integrity policy:	Relevant provisions in research integrity policy or related
standards	 Apply to anyone conducting research under the 	policies.
2. Ethical, legal and other	auspices of the institution? For example: research	
frameworks	students, employees, independent contractors and consultants, visiting or emeritus staff, staff on joint	

Relevant Commitment(s)	Self-assessment questions	Possible evidence
4. Dealing with research misconduct	clinical or honorary contracts, or anyone conducting research using institutional facilities or on institutional premises?	
	 Apply to all research projects conducted under the auspices of your institution, regardless of whether they are externally funded or not (e.g. student research or non-externally funded research by staff)? If not, what provisions or arrangements cover any research that falls outside of the policy? 	
1. Maintaining the highest standards 2. Ethical, legal and other frameworks 4. Dealing with research misconduct	 How applicable is the research integrity policy to all disciplines of research? Is it sensitive to different disciplinary norms? Does the research integrity policy make it clear that its principles and standards apply to all stages of a research project, from beginning to end? 	 Relevant provisions in research integrity policy. Sources of advice, training and resources available to researchers.
1. Maintaining the highest standards 2. Ethical, legal and other frameworks	Does your research integrity policy (or related policies) address the following broad areas (where relevant to your institution)?	 Relevant provisions in research integrity policy or related policies/ guidance or related templates (for example, consent forms). Sources of advice, training and resources available to researchers.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
4. Dealing with research misconduct	 Research involving human participants, human tissue or remains, or personal data, including provisions for vulnerable participants. 	
	 Clinical trials, including medicinal and device trials that fall under UK and EU legislation. 	
	 Other types of health and social care research. 	
	 Research involving animal subjects/ animal materials, both those are covered by UK legislation and those which are not covered. 	
	 Data management and protection. 	
	 Off-site and lone working. 	
	 Research outside the UK. 	
	 Internet-mediated research, including research involving social media platforms. 	
	 Environmental protection. 	
	 Research involving cultural objects. 	
	 Conflicts of interest/ competing interests (including an institutional due diligence process). 	

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	 Signposting to the internal and external ethical review requirements. Publication and authorship. Open research. Research misconduct: reporting and investigation. Reproducibility. 	
1. Maintaining the highest standards 2. Ethical, legal and other frameworks 4. Dealing with research misconduct	 Do your research integrity policy and related policies (e.g. policy for ethical approval, research misconduct procedure) set out: Acceptable conduct for research involving: human participants; human tissue, material or remains; personal data, animal research subjects and animal materials; and any other types of research as required by your institution? What conduct is unacceptable in the above types of research, taking into account the revised definition of research misconduct in the 2019 Concordat? 	 Relevant provisions in research integrity policy and other policies/ guidance. Sources of advice, training and resources available to researchers.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
1. Maintaining the highest standards 3. Research culture	 Does your institution have policies/ guidance on issues which can affect research integrity? For example: Bullying and harassment, and other student/ staff welfare issues. Collaborative (+/- international) research. Data protection and security for collection, retention and sharing of (sensitive) data. Environmental impact of research and sustainability. Equality, diversity and inclusion. Financial management and due diligence in relation to research projects. Incentives in research. Intellectual property. Mentoring. Open research. Peer review (grants and project proposals or publications). Possible future use and dual-use. 	 Relevant policies/ guidance and/or information on how research integrity is addressed in these areas by other means. Publicly accessible web link to policies/ guidance where they exist. Sources of advice, training and resources available to researchers.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	 Public engagement and impact, recognising the value of presenting work to other researchers and to the public? 	
	 Publication and authorship., including improper practices in dissemination (e.g. authorship disputes, predatory journals, image manipulation). 	
	 Recognising the value of dissemination of all results (to include publishing or otherwise sharing negative or null results)? 	
	Research assessment.	
	 Researcher recruitment, development, assessment and promotion. 	
	Research design.	
	Risk management processes, e.g. health and safety.Societal impact of research.	
	 Workload models for research and other staff. 	
2. Ethical, legal and other frameworks	Do you have a policy and system for the ethical review and approval of research projects?	Policy for ethical approval and associated systems.Publicly accessible web link to policy.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	 Are your policies on ethical review and approval available to all researchers? Are researchers given support relating to ethics, legal and professional requirements? Do your policies on ethical review and approval apply to: Anyone conducting research under the auspices of the institution, including but not limited to: research students; employees; independent contractors and consultants; visiting or emeritus staff; staff on joint clinical or honorary contracts; or anyone conducting research using institutional facilities or on institutional premises? Research involving: human participants; human tissue, material or remains; personal data, animal research subjects; and any other types of research as required by your institution (i.e. that might not involve humans or animals)? Do your policies on ethical review and approval apply to undergraduate research? If so, what provisions exist to ensure that the process is proportionate? 	 Relevant provisions in ethics policy. Description of the university's system for seeking ethical approval. Ethics policy includes information on relevant external systems for ethical review and when they apply. For example, NHS and social care. Structure and remit of institutional ethics committees. Sources of advice, training and resources available to researchers. Research Ethics Committee members training.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	 How do you ensure that ethical issues are appropriately considered in undergraduate research projects? 	
	Do your policies on ethical review and approval set out:	
	 Principles underpinning the ethical conduct of research? For example: autonomy, beneficence, confidentiality, integrity and non-maleficence. 	
	 A process for the objective and rigorous ethical review of research which falls within the scope of the ethics policy? 	
	 Principles which inform that review process? For example: competence, facilitation, independence and openness. 	
	 The various approaches to ethical review which are in use at your institution and when they are relevant to a research project? For example, university ethics approval, NHS or social care settings, prison and probation or requirements for international research. 	
	 An overview of your institution's ethics committees and their relationship? 	

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	 Sources of help and training available to researchers? Appeals process? Annual reporting and review? Do your policies on ethical review and approval take account of the requirements of different external bodies, depending on the discipline of research in question? 	
2. Ethical, legal and other frameworks	 Does your institution have specific policies or guidance on: Studies that require a review under the HRA Governance Arrangements for Research Ethics Committees (GAfREC) (e.g. human clinical trials or research involving human tissue)? Other health and social care research? Research involving animal subjects and animal materials, including implementation of the '3Rs' – Replacement, Reduction and Refinement; PREPARE (Planning Research and Experimental Procedures on Animals: Recommendations for Excellence); ARRIVE (Animal Research: Reporting of In Vivo Experiments) guidelines? 	 Relevant policies or guidance. Publicly accessible web link to policies/ guidance.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
Maintaining the highest standards Dealing with research misconduct	Has your organisation considered whether guidance on research integrity is needed for research-related areas such as service evaluation, consultancy and knowledge exchange/ transfer?	 Relevant policies and/or information on how research integrity is addressed in these areas by other means. For example, responsible consultancy and innovation, ethical licencing, review of funding sources.
Maintaining the highest standards	How do you ensure that your various policies on research integrity and related issues cross-reference each other?	Relevant cross-referencing in research integrity policy and other policies/ guidance.
2. Ethical, legal and other frameworks	Do they contain consistent expectations and avoid contradicting each other?	Wording checked during design and revision of policies to ensure clarity and avoid contradictions.
3. Research culture	How do they fit in with student regulations? Are they	Relevant cross-referencing and recognition in institutional
4. Dealing with research misconduct	consistent, and do policies and regulations use the same definitions for expected standards and unacceptable behaviours? Are they aligned with what is expected by the Office of the Independent Adjudicator and the Office for Students?	research strategy.
	Are your policies on research integrity consistent with other institutional policies such as a whistleblowing policy?	
	Are your research integrity policy and related policies recognised in the institution's research strategy?	

Relevant Commitment(s)	Self-assessment questions	Possible evidence
1. Maintaining the highest standards	Have you reviewed your policies and systems against external standards and guidance? For example:	Information on how policies were developed and how they will be reviewed.
2. Ethical, legal and other frameworks 3. Research culture 4. Dealing with research misconduct	 The Concordat to Support Research Integrity. Requirements of regulatory and statutory bodies, and any other legal requirements. Higher education funding bodies. Research funders. Learned societies and professional bodies. 	will be reviewed.
	 UK Policy Framework for Health and Social Care Research. NHS Health Research Authority (e.g. HRA Governance Arrangements for Research Ethics Committees). An Institutional Framework for the 3Rs. The Concordat on Openness on Animal Research in the UK. Committee on Publication Ethics (e.g. Cooperation Between Research Institutions and Journals on Research Integrity Cases). 	

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	 UK Research Integrity Office (e.g. Code of Practice for Research, Procedure for the Investigation of Misconduct in Research and Research Integrity-a primer on research involving animals). 	
	 Association for Research Managers and Administrators/ UK Research Integrity Office Research Ethics Support and Review in Research Organisations. 	
	 The Concordat to Support the Career Development of Researchers. 	
	 International bodies for research integrity (e.g. European Code of Conduct for Research Integrity, Singapore Statement on Research Integrity and Montreal Statement on Research Integrity) and for discipline-specific research standards (e.g. World Medical Association Declaration of Helsinki). 	
Maintaining the highest standards Ethical, legal and other frameworks	Have you liaised with appropriate stakeholders in your research institution, i.e. Human Resources, Staff / Student Development, Doctoral Training Centre, Registry, Insurance, Health and Safety, Library/Information centre, Data Protection, Governance etc. as necessary, to ensure research integrity policies are in line with relevant	Information on how policies were developed and how they will be reviewed.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
4. Dealing with research misconduct	legislation, statutes and ordinances, and other institutional policies and systems?	
	 Have you liaised with researchers, research students, professional services staff, technicians and other similar roles to inform the design, rollout, ongoing support and periodic revision of research integrity policies and systems? 	

Relevant Commitment(s)	Self-assessment questions	Possible evidence
1. Maintaining the highest standards 2. Ethical, legal and other frameworks 3. Research culture 4. Dealing with research misconduct	 How have you publicised the standards and ethos which your institution wishes to underpin its culture of research? How have you publicised your research integrity policy and related guidance to all staff, students and others who conduct research under the auspices of your institution? Have you publicised the following to all staff, students and others who conduct research under the auspices of your institution? Policy for ethical approval and associated systems, and that it applies to all research involving: human participants; human tissue, material or remains; personal data, animal research subjects and animal materials; and any other types of research as required. Research misconduct policy. Policies on human clinical trials; health and social care research; research involving human tissue, material or remains; and research involving animal subjects and animal materials. Policies on issues which can affect research integrity (see 'Policies and systems', above, for examples). 	 Central institutional web page(s) on research integrity and/or links to research integrity resources from College/ Faculty/ School/ Departmental website areas. Includes publicly accessible links to research integrity policy, policy and systems for ethical approval, and research misconduct procedure. Presentations at inductions, PGR committees, Faculty/ School/ Departmental committees and meetings. Lectures and workshops for research staff and students, including any recordings put on institutional website. Research integrity component of institutional e-learning package. Promotional material, such as leaflets, summarising the institution's approach to research integrity and available policies and resources. A suite of resources such as templates and available support for research practitioners, including students. Local research integrity leads/ champions/ advisers and information on their work and awareness-raising activities.

Relevant Commitment(s)	Self-assessment questions Sources of help, training and advice (institutional and external) available on issues of research integrity. Formal or informal to provide information, resources and support to researchers and professional services staff, and/or to encourage them to support each other and share best practice.	Possible evidence
 Maintaining the highest standards Ethical, legal and other frameworks Research culture Dealing with research misconduct 	 Do you make information on your institution's approach to research integrity, research culture, the institution's requirements in these areas, and sources of guidance and support available to researchers (including research students) when they join the organisation? How do you make sure that this information is communicated to experienced/ senior researchers when they join the organisation, and is not limited to early-career researchers? 	 Research integrity component of staff inductions: For early-career researchers. For Principal Investigators, supervisors, managerial and other senior positions. Research integrity component of research student inductions.
3. Research culture	Do you refresh the awareness of staff in leadership positions (at whatever level) that they have a responsibility to raise awareness of research integrity, research culture the institution's requirements in these areas, and sources of guidance and support?	 Presentations, circulars, and promotional material which highlight this responsibility Examples of the training and support accessible by staff in leadership positions to help them develop their skills.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	 Do you provide staff with management/supervisory responsibilities with access to management training and with support in developing their managerial and communication skills within a clearly set out framework of expectations? Do you circulate research culture resources to staff and students, in particular staff with management/supervisory responsibilities (e.g. UKRIO-Royal Society Integrity in Practice Toolkit, UK Reproducibility Network Open Research Primers)? Do you make research culture resources available to encourage researchers (at all career stages/levels, not just management/supervisory) to engage in discussions of research integrity with their peers (e.g., UKRIO-Royal Society Integrity in Practice Toolkit, ReproducibiliTea, UK Reproducibility Network's Local Network Leads)? 	 Examples of the material and resources that are made available to staff in leadership positions to assist them in raising awareness. Examples of the material and resources that are made available to researchers to encourage peer-led discussions.
 Maintaining the highest standards Ethical, legal and other frameworks 	 Do you encourage researchers to familiarise themselves with the legal, ethical and other frameworks relevant to their work? Do you signpost key developments in legal, ethical and other frameworks to researchers? Are channels available 	 Relevant provisions in research integrity policy and ethical approval policy; guidance from Faculties/ Schools etc. on this issue. Communications highlighting revisions or other changes to legal, ethical and other requirements for research.

Relevant Commitment(s)	Self-assessment questions for researchers to highlight such developments and their impact on particular disciplines/types of research undertaken at the organisation to institutional research integrity specialists?	Possible evidence
1. Maintaining the highest standards 2. Ethical, legal and other frameworks 3. Research culture 4. Dealing with research misconduct	Can members of the public, participants on research, external researchers and representatives of other organisations access policies and contact points for research integrity and research misconduct?	 Research integrity policies, including those on research misconduct and 'whistleblowing', accessible on the organisation's external website. Named contacts for research integrity and research misconduct identified on the organisation's external website and other appropriate places (e.g. <u>UKRIO website</u>). Institution's annual research integrity statement.
1. Maintaining the highest standards 2. Ethical, legal and other frameworks 3. Research culture 4. Dealing with research misconduct	What information on research integrity is provided to research participants, including patients and trial participants?	 Examples and exemplars of information provided to research participants. Public engagement activities conducted by your institution, particularly involving research participants or patients, which included coverage of research integrity.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
1. Maintaining the highest standards 2. Ethical, legal and other frameworks 3. Research culture 4. Dealing with research misconduct	 How is your research integrity policy implemented? Who or which body is responsible for ensuring that its provisions are carried out within the institution? Are there appropriate staff and other resource within the institution to do this effectively? Do you integrate your communication activities with other institutional communications/ activities, so research integrity is not seen as something in isolation or an 'addon'? 	 Examples of how awareness-raising about research integrity has been incorporated into other institutional communications and activities. Specific activities to capture the interest of researchers in research integrity, from students and early-career researchers to senior researchers and institutional leaders. Specific activities to seek feedback on the institution's research culture, including the views of researchers and others involved in its research.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
3. Research culture 5. Strengthening research integrity	 How is research integrity recognised in your institution's research strategy? How are the standards and ethos which your institution wishes to underpin its culture of research recognised in your institution's research strategy? How are issues that can affect research integrity recognised in your institution's research strategy? E.g. equality, diversity and inclusion; incentives in research; research assessment; promotion criteria; workload models; impact of bullying and harassment, etc. (see 'Policies and systems', above, for more examples). Does research integrity feature in your institution's risk management matrix or register (i.e. has oversight at senior level)? 	Relevant provisions in institutional research strategy. Relevant provisions in institutional risk management matrix or risk register.
Maintaining the highest standards Ethical, legal and other frameworks Research culture	Does a senior group within your institution have strategic responsibility for the promotion and monitoring of research integrity (including research culture) and co-ordination of different responsibilities across the governance structure? For example, research committee, ethics committee, governance and audit committee.	 Terms of reference for the group. Group listed in research integrity policy and related institutional policies. Examples of how you have publicised its remit and contact information.

Relevant Commitment(s) 4. Dealing with research misconduct 5. Strengthening research integrity	Self-assessment questions • Does a senior group within your institution participate in an annual monitoring exercise to demonstrate that the institution has met the commitments of <i>The Concordat to Support Research Integrity?</i>	Possible evidence Annual review of all policies and systems to identify shortcomings in relation to the commitment to the concordat, and where necessary describe future amendments and planning
1. Maintaining the highest standards 2. Ethical, legal and other frameworks 3. Research culture 4. Dealing with research misconduct 5. Strengthening research integrity	 Has your institution identified a senior member of staff to act as the operational lead on matters of research integrity? Has your institution identified a senior member of staff to act as the first point of contact for anyone wanting more information on matters of research integrity (with the option of this role being taken on by the same person as the operational lead, above)? If your institution has a collegiate or other devolved structure, do you also have other named points of contact at appropriate levels? For example, at college or divisional level. Do you publicise their role and contact information? Is their information kept up to date and publicly available on your website? 	 Senior members of staff listed in research integrity policy and related institutional policies. Examples of how you have publicised their role and contact information, internally and externally. URL of a publicly accessible web page listing relevant contact information. Similar information for any other named points of contact.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
1. Maintaining the highest standards 2. Ethical, legal and other frameworks	 Have you assessed: If the standards and ethos which your institution wishes to underpin its culture of research are reflected in its research policies, practices and decision-making? 	 Snapshot survey of colleges/ faculties/ schools/ central research departments and committees/ professional services departments etc. Mapping exercise.
 3. Research culture 4. Dealing with research misconduct 5. Strengthening research integrity 	 If central research departments and committees are working with colleges, faculties, schools, professional services departments and others to support good research practice and embed a healthy research culture? If institutional research integrity standards are seen as practical and relevant by colleges/ faculties/ schools/ etc. or if they view them as burdensome, 'one size fits all' or irrelevant? If policies, sources of help, development opportunities etc. are sensitive to, and support, the working practices and disciplinary norms of colleges/ faculties/ schools/ etc.? How equality, diversity and inclusion has been supported in your research integrity strategy and activities? 	 Internal monitoring exercises. Feedback and 'lessons learned' from reporting of concerns, whether in relation to research misconduct/ questionable practices or otherwise) and how they were subsequently addressed. Any activities to seek feedback on the institution's research culture, including the views of researchers and others involved in its research. Any revision of policies, communication and training activities, sources of help etc. made following the above.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	 How sustainability has been taken account of in your research integrity strategy and activities? 	
	 The impact of issues that can affect research integrity on research and researchers at your institution? E.g. incentives in research; research assessment; promotion criteria; workload models; impact of bullying and harassment, etc. (see 'Policies and systems', above, for more examples). 	
	 How confident are you that researchers have access to the skills and resources they need to meet required standards? 	
	 How confident are you that any concerns about research integrity (not limited to those about research misconduct and questionable practices) are being raised with the institution and properly addressed? 	
	 How confident are you that researchers, especially early- career researchers, feel confident that they can raise any concerns about research integrity and without any stigma attached/suffering any detriment? 	

Relevant Commitment(s)	Self-assessment questions	Possible evidence
5. Strengthening research	How has your institution captured the interest of researchers in research integrity? Especially senior researchers?	 Engage senior researchers/ managers as 'champions' to promote culture of research integrity amongst local research environment and to assist with implementation plan. Incentivise engagement with research integrity through recognition in performance review, workforce/ workload model planning and other relevant staff development processes, including continuing professional development (CPD). Use of annual staff appraisals to assess senior researchers'
		engagement at this level, and the use of annual staff surveys to enable issues around research culture to surface and be addressed.
		 Incentivise engagement with research integrity through implementation and communication of clear policies on authorship and intellectual property.
		 Presentations on the importance of research integrity by speakers who hold senior research or leadership roles at other institutions.
		 Highlighting of good practice in relation to research integrity and the benefits it can bring to researchers. For example, better protection re. liability and institutional insurance

Relevant Commitment(s)	Self-assessment questions	Possible evidence
		constraints, greater assurance of continuing opportunities to seek funding, increased value of research and impact, 'making sure you're all on the same page' in collaborative research with different teams, organisations, countries. • Similarly, highlighting of poor or unacceptable practices and the harm it can cause to a researcher's career, regardless of seniority, and how researchers and employing institutions can prevent or avoid these practices from happening
1. Maintaining the highest standards 2. Ethical, legal and other frameworks 3. Research culture 4. Dealing with research misconduct 5. Strengthening research integrity	Does your institution provide senior staff, Pls, PhD supervisors, research managers, etc. with information and resources to help them promote research integrity and the institution's requirements in this area, the standards and ethos which your institution wishes to underpin its culture of research, and sources of guidance and support to their colleagues?	 Examples of the material and resources that are made available to assist such staff in raising awareness. Share resources and best practice from other organisations as examples of either good research practice or supporting research culture/integrity.
1. Maintaining the highest standards	Do you encourage staff to support each other informally and share their perspectives and experiences?	Information on mentoring.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
2. Ethical, legal and other frameworks3. Research culture		 Working group, one-day conference, case study workshop, seminars, panel discussions, networking events. Informal or formal networks or initiatives active at your institution, including those with cross-institutional scope.
1. Maintaining the highest standards 2. Ethical, legal and other frameworks 3. Research culture 4. Dealing with research misconduct 5. Strengthening research integrity	 Does your institution provide training to your researchers to help them achieve the following broad aims? Understanding of the required standards and what is considered 'best practice' for their research. Recognition that research integrity is relevant to all research and all researchers. Encouraging reflection on the challenges involved in conducting ethical and high-quality research, and how they might be addressed. The important of a healthy research culture and how individuals and organisations can support this. The impact, both positive and negative, of incentives in research, and what the institution is doing to mitigate against negative impacts. Understanding that researchers should speak out if 	 Information on: The training and educational resources available to researchers. The external sources of advice that you make your staff and students aware of (e.g. regulators, professional bodies, UKRIO). The audiences that have been reached by your education and training activities. Data on how effective training has been. Samples of training materials, case studies etc. Research integrity component of institutional e-learning package. Online self-assessment tools, for both early-career and more experienced researchers.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	misconduct, the sources of help available to them and how to access them, and how to report any concerns, including whistleblowing policies. • Have you promoted training and development opportunities? • Have you encouraged research staff and students to attend training and development opportunities?	 Training materials hosted on institutional web page(s) on research integrity and/or linked to from College/ Faculty/ School/ Departmental website areas. Any training with a particular focus, for example: The value of ethical review and the process of seeking ethical approval. Discipline-specific training (e.g. statistics). College, faculty- or school-level activities. Specific types of research (e.g. clinical trials; research involving animal subjects; covert research). Specific aspects of the research process, such as publication and authorship. Introduction or revision of institutional policies and systems for research.
 Maintaining the highest standards Ethical, legal and other frameworks Research culture 	 How do you incorporate research integrity training and understanding of relevant policies and guidelines into teaching / development / other activities for: Research students? Research staff, including early-career researchers? 	 Information on modules and workshops for: Postgraduate researchers. Post docs. Staff inductions.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
4. Dealing with research misconduct	 Senior staff, including researchers and other managerial positions? Professional services staff? Technical staff? 	 New PhD supervisors. New Principal Investigators. Principal Investigators undertaking large and/or international collaborative projects for the first time. New members/ chairs of ethics committees. New Heads of Departments. 1-2-1training or coaching when appropriate (e.g. for more senior staff). Refresher courses for staff and students. The audiences that have been reached by these education and training activities.
2. Ethical, legal and other frameworks3. Research culture	 Do you provide training for researchers involved in: Experimental design? Research data management? Data protection? Human participant research, including clinical trials? Other health and social care research? 	 Information on: The training and educational resources available to these researchers. Audiences reached by these education and training activities.

Self-assessment questions: culture, development and leadership

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	 Research involving human tissue, material or remains? Research involving personal data? Animal subject research, including implementation of the '3Rs'? 	
1. Maintaining the highest standards 2. Ethical, legal and other frameworks 3. Research culture 4. Dealing with research misconduct	 Do you provide training, continuing professional development and support for staff involved undertaking the following roles: Chairs or members of ethical review committees? Research governance? Research integrity officer or equivalent role? Professional services staff (whether research integrity officers or otherwise) responsible for the operation of procedures for the investigation of alleged research misconduct? 	 Information on: The training and educational resources available to such staff. Audiences reached by these education and training activities.
	 'Named Person' roles? Members of research misconduct panels?	
1. Maintaining the highest standards	Do you integrate your training and development with the activities of other groups responsible for staff and	Examples of how research integrity training has been incorporated into other institutional development activities.

Self-assessment questions: culture, development and leadership

Relevant Commitment(s)	Self-assessment questions	Possible evidence
2. Ethical, legal and other frameworks	research student development, so research integrity is not seen as something in isolation or an 'add-on'?	
3. Research culture	 For example, staff development, central student 	
4. Dealing with research misconduct	support departments, PGR tutors, support programmes for postdocs and new PI/CIs.	
1. Maintaining the highest standards	Have you assessed the required level and content of your training and development, and how it could best be	Outcome of this assessment reflected in your training content and delivery.
2. Ethical, legal and other	provided? For example:	
frameworks	 What is provided centrally and what is done at discipline level? 	
3. Research culture		
4. Dealing with research misconduct	 What expertise exists in your institution to deliver the training at either central or local level? 	
	 How does the institution obtain expertise if it does not have it? 	
Maintaining the highest standards	Does your organisation liaise effectively with peer organisations to promote consistency and good practice	Examples of such work, whether informal or formal collaborations.
2. Ethical, legal and other frameworks	between organisations, in supporting, promoting and managing research integrity?"	Collaborations with external organisations to support and strengthen understanding and application of research
3. Research culture		

Self-assessment questions: culture, development and leadership

Relevant Commitment(s)	Self-assessment questions	Possible evidence
4. Dealing with research misconduct		integrity issues, whether UK-based institutions or those from other countries.
5. Strengthening research integrity		 Regional, national or international initiatives on research integrity which your institution has contributed to or participated in.
		 Membership of, or collaborations with, organisations with a particular interest in research integrity and related issues, such as the UK Research Integrity Office.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
1. Maintaining the highest standards 4. Dealing with research misconduct	 Do you have an institutional procedure for the reporting and investigation of allegations of research misconduct? Does it align with your research integrity and other relevant policies, and with your statutes and ordinances, and not conflict with them? Does it align with relevant external guidelines and requirements (e.g. UKRIO Procedure for the Investigation of Misconduct in Research, The Concordat to Support Research Integrity, contractual requirements from research funders relating to the investigation of alleged research misconduct and/or the review of such investigations)? Does it include: A clear and up-to-date definition of research misconduct? A process for reporting concerns about the conduct of research? A screening or initial assessment stage? A formal investigation stage? A review or appeals process? 	 Research misconduct procedure and policy on whistleblowing, including links on a publicly accessible web page. Relevant provisions in research misconduct procedure. References to research misconduct procedure in other institutional policies and in statutes and ordinances. Information on how you have publicised the research misconduct procedure and the process for reporting concerns about research misconduct.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	 A reporting and outcomes stage. Standards to ensure that investigations are objective, thorough and fair, and carried out in a transparent and timely manner. 	
	 Principles to inform the operation of the procedure. Provisions for appropriate confidentiality.	
	 Clarification on the skills, knowledge, experience and authority which should be possessed by the persons responsible for the operation of the procedure. 	
	 Provisions for involved parties to access necessary support, e.g. practical/specialist help/advice for panel members and those operating the procedure, pastoral care for complainants, respondents and others. 	
Maintaining the highest standards Dealing with research misconduct	 Does your research misconduct procedure apply to: All disciplines of research? Anyone conducting research under the auspices of the institution, including but not limited to: research students; employees; independent contractors and consultants; visiting or emeritus staff; staff on joint clinical or honorary contracts; or anyone conducting 	 Scope/ remit of research misconduct procedure. Links between research misconduct procedure and relevant student regulations. Wording checked during design and revision of policies to ensure clarity and consistency, and avoid contradictions, including exam or other student regulations.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	research using institutional facilities or on institutional premises? • Does your research misconduct procedure explain if and under what circumstances the procedure applies to research students? Does it also note any other mechanisms that may be used to investigate the conduct of research students, such as exam or other student regulations?	Relevant cross-referencing in research misconduct procedure and other policies/ guidance, including exam or other student regulations.
	 Does your research misconduct procedure explain what process is used to address allegations involving academic staff and research students and/or other types of staff? 	
	 Do your research misconduct procedure, research integrity policy and related guidance use the same definitions for expected standards and unacceptable behaviours? Do they avoid contradicting each other? Do they cross-reference each other? 	
 Maintaining the highest standards Research culture 	Does your institution have a named point of contact (or recognise an appropriate third party) to act as confidential liaison for whistleblowers or anyone wishing to raise	'Named person' listed in research misconduct procedure and related institutional policies.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
4. Dealing with research misconduct	 concerns about the research being conducted under your auspices? Is this 'named person' identified in your research misconduct procedure, your institutional whistleblowing policy and on your website? Do you publicise their role and contact information? If your institution has a collegiate or other devolved structure, do you also have other named points of contact at appropriate levels? E.g. college or divisional level? Do you publicise their role and contact information? 	 Examples of how you have publicised their role and contact information, including to external collaborators and the public. URLs of a publicly accessible web page listing relevant contact information and any additional sources for this information (e.g. <u>UKRIO website</u>). .Similar information for any other named points of contact.
Maintaining the highest standards Research culture Dealing with research misconduct	Are disclosures relating to alleged research misconduct included within the scope of your institutional whistleblowing policy?	Relevant provision in institutional whistleblowing policy.
Maintaining the highest standards Research culture	To encourage the reporting of concerns, especially by students, early-career researchers, research participants and the public, does your procedure allow for concerns to be raised with the named person via, or with the assistance of, an intermediary? For example, a line	 Relevant provisions in research misconduct procedure. Relevant provisions in related institutional policies, e.g. whistleblowing policy.

Relevant Commitment(s) 4. Dealing with research misconduct	Self-assessment questions manager, tutor/ supervisor, head of school, trade union representative, officer of the Students' Union, colleague or a third-party organisation which has been recognised by an employer to act as a confidential liaison for whistleblowers?	Possible evidence
4. Dealing with research misconduct	Does your research misconduct procedure have the ability to initiate an investigation, at your institution's discretion, where the complainant is anonymous or where there is no specific complainant?	 Relevant provision in research misconduct procedure, with any decision to initiate such an investigation taking into account: The seriousness of the concerns raised. The amount of information provided with the concerns. The ability to investigate the concerns using alternative sources of information.
4. Dealing with research misconduct	Does your research misconduct procedure allow your institution to follow an investigation through to completion even in the event that the individual concerned leaves the institution? Does the procedure allow you to investigate the conduct of individuals who have already left the institution?	Relevant provision in research misconduct procedure.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	 Does your research misconduct procedure allow you to continue an investigation if the complainant/initiator withdraws from the process? Does your research misconduct procedure permit you to take appropriate action if an allegation is deemed to be 	
	frivolous or malicious following an investigation?	
4. Dealing with research misconduct	 Does your research misconduct policy include the provision to pass a matter to a regulator, other statutory body or professional body for consideration? 	Relevant provision in research misconduct procedure.
4. Dealing with research misconduct	As well as considering the conduct of individuals, does your research misconduct procedure include the following within its scope?	Relevant provisions in research misconduct procedure.
	 Any actions necessary to safeguard research participants, patients and any other involved parties. 	
	 Correcting the record of research. 	
	 Addressing and remedying any research misconduct that may have taken place. 	
	 Making relevant reports, with appropriate confidentiality, to regulators, professional bodies, funders, editors/journals/publishers/others responsible 	

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	for the research record, research participants and others.	
	 Reporting on any procedural or organisational issues which should be reviewed by the institution. 	
	 Initiating further investigations of alleged research misconduct. 	
	 Remedial training, mentoring and monitoring when an allegation of research misconduct was upheld but the person(s) involve continue to work or study at the institution. 	
	 Non-disciplinary approaches to resolve matters which are of a relatively minor nature or involve honest error (i.e. there was no intent to deceive). For example, mediation between involved parties, training, mentoring, guidance and monitoring. 	
	 Safeguarding/ restoring the reputations of respondents who have been exonerated. 	
	 Safeguarding/ restoring the reputations of whistleblowers/ complainants/ initiators who are found to have acted in good faith/in the public interest, whether their concerns were upheld or not? 	

Relevant Commitment(s)	Self-assessment questions	Possible evidence
4. Dealing with research misconduct	 Does your research misconduct procedure have the option, at your institution's discretion, for the screening/ initial assessment stage (or the equivalent) to be carried out by a small panel rather than a single person? If so, does this panel have the option of including a member from outside your institution? 	 Relevant provision in research misconduct procedure. For example, when an allegation is deemed to be particularly complex or contentious; the field of research is new, particularly specialised, or has been the subject of considerable debate in the academic, scientific or medical communities; or the field of research has been the subject of public debate and concern.
4. Dealing with research misconduct	Does your research misconduct procedure require that Formal Investigation Panels (or the equivalent) include a member from outside your institution?	Relevant provision in research misconduct procedure.
4. Dealing with research misconduct	 What steps do you take to ensure that the procedure is followed when an allegation is received? How do you ensure a proper transfer to a different internal or external process when necessary? How would you investigate a complaint that an investigation had not been conducted in accordance with due process (as distinct from an appeal against the outcome of the investigation)? How would you handle allegations which are found to be vexatious? As in 'Policies and systems', above, have you: 	 Information on how policies were developed and how they will be reviewed. Feedback and 'lessons learned' from reporting of concerns, whether in relation to research misconduct/ questionable practices or otherwise) and how they were subsequently addressed. Any activities to seek feedback on the institution's research culture, including the views of researchers and others involved in its research.

Relevant Commitment(s)	Self-assessment questions	Possible evidence
	Reviewed your research misconduct procedure against	
	external standards, including UKRO guidance, The	
	Concordat to Support Research Integrity and	
	requirements of research funders?	
	 Liaised with other professional services (e.g. Human 	
	Resources, etc.) to ensure that your research	
	misconduct procedure is in line with relevant legislation	
	and with other institutional policies and systems, and	
	with your statutes and ordinances?	
	 Ensured that your procedure has appropriate provision 	
	for documentation and record keeping?	
	Do you avoid using inappropriate use of legal instruments	
	towards whistle-blowers and others involved in	
	investigations, e.g. non-disclosure agreements?	
	Do all involved in the operation of your procedure,	
	including 'named persons', Screeners/ Screening Panels	
	and Formal Investigation Panels, declare competing	
	interests and are competing interests managed	
	appropriately?	

Relevant Commitment(s)	Self-assessment questions	Possible evidence
1. Maintaining the highest standards 2. Ethical, legal and other frameworks 4. Dealing with research misconduct 5. Strengthening research integrity	 How regularly do you review the following policies and systems, bearing in mind revisions to The Concordat (currently to be reviewed every five years), changes to legislation and other important updates? Research integrity policy. Policy for ethical approval and associated systems. Research misconduct policy. Policies on issues which can affect research integrity (see 'Policies and systems', above, for examples). How often do you seek feedback from researchers, research students and professional services staff on policies and associated systems, their communication and associated training? 	 Information on when policies were last updated. Proposed future review cycle (at least every five years). Information on how feedback is sought on policies. 'Frequently asked questions' drawn from common or notable issues raised in feedback and listed on institutional website. Survey of all researchers and other members of staff to assess how aware they are of the relevant contacts and procedures for making allegations of research misconduct.
2. Ethical, legal and other frameworks5. Strengthening research integrity	 What is your reporting structure from local research ethics committees to your institution's central research ethics committee (or equivalent body)? For example, local ethics committees might make an annual report to the central committee. It could contain summary data on the projects reviewed (number, discipline/ type, outcome of review process); 	 Information in your institution's policy for ethical approval on what information is shared and how. Examples of information shared and any actions taken further to the summary information, all anonymised as appropriate.

	information on any strengths, issues or trends identified; and a random sample of approved applications and, in some cases, disputed applications as well.	
2. Ethical, legal and other frameworks5. Strengthening research integrity	Do you have review meetings between central ethics committee members and local ethics committees and officers?	 Information on the regularity of meetings. Minutes of meetings.
 Maintaining the highest standards Ethical, legal and other frameworks Dealing with research misconduct Strengthening research integrity 	 Do you have systems for monitoring compliance with institutional and external requirements? For example: Clinical trial model A model for projects that have been determined to be high risk by a clearly defined criteria Proportionate model for lower risk projects. Self-monitoring when appropriate. Do you carry out: Monitoring of a random sample of research projects? Internal audits? Annual risk review? 	 Information on systems for monitoring and audit. Summary data from monitoring and audit of research projects. Anonymised reports on specific projects. Reports from relevant external inspections. For example, Medicines and Healthcare products Regulatory Agency, Human Tissue Authority and the Home Office.

	Do you incorporate outcomes of external inspections (e.g. Medicines and Healthcare Products Regulatory Agency, Human Tissue Authority and the Home Office) into your own monitoring of compliance with research integrity standards?	
4. Dealing with research misconduct 5. Strengthening research integrity	Is anonymised summary information on allegations of research misconduct received or (formally) investigated by your institution made available to relevant institutional bodies and relevant external bodies? For example, your governing body, research committee, central and other ethics committees, human resources/ student services and, where required, research funders.	 Relevant provisions in your institution's research misconduct procedure. Confirmation that the institution fulfilled any requirements to make reports to external bodies, including regulatory and professional bodies, regarding the initiation or completion of a formal investigation.
	 Please note that thresholds vary. Some institutions may share anonymised summary information concerning all allegations received; others concerning allegations which progressed to the screening stage; while some may only share information on allegations which underwent formal investigation. Are anonymised learning points from completed 	 Information on what material is shared and how, plus anonymised examples. Information on how appropriate confidentiality is maintained in relation to this information. Information on any actions taken further to the summary information.
	investigations made available to relevant institutional bodies and included in training for research staff and students? Learning points can include improvements and positive change and should not be limited to preventative measures.	 What provisions have been made to prevent the same type of incident re-occurring? Any improvements to reporting mechanisms or investigation processes relating to allegations of misconduct.

4. Dealing with research misconduct 5. Strengthening research integrity	If research misconduct investigations are carried out at a devolved level (i.e. College / Faculty/ School, etc.), are confidential reports on allegations of research misconduct received or investigated at the devolved level made to your institution's 'named person'?	 Relevant provisions in your institution's research misconduct policy. Information on what information is shared and how, including provisions for confidentiality. Information on any actions taken further to the summary information.
5. Strengthening research integrity	 Have you made an annual statement on research integrity to your institution's governing body? See later in this document for discussion of what an annual statement might contain. Have you made it public? Have you made a similar annual statement/ report to any external funders or other bodies which require one (e.g. UK Research and Innovation, US Office of Research Integrity)? Have you sent a link to the statement to the secretariat of the signatories of the Concordat? 	 Publication of annual statement. Information on how you have publicised the annual report, including URL of publicly accessible web page. Web page also holds links to previous annual statements for purposes of comparison. Annual statements/ reports that have been submitted to relevant external funders and other bodies.

This section discusses the nature of the Concordat and key themes to consider when implementing its principles and standards in a particular research institution, complementing the detailed questions in the self-assessment tables. The views expressed on the Concordat are those of UKRIO and are not necessarily the views of the Concordat Signatories. Instead, they reflect UKRIO's considerable experiences in helping individuals and organisations interpret and implement the Concordat since 2012.

The Concordat: scope and purpose

The Concordat to Support Research Integrity is designed to provide a national framework for good practice in research. Under the umbrella term 'research integrity', it sets out principles and broad responsibilities not only for the design, conduct, reporting and dissemination of research, but also for how such research is funded/commissioned, managed, monitored/audited and reviewed to ensure that it is in line with ethical, professional, legal and other frameworks.

Importantly, the Concordat goes beyond the scope of individual research projects by setting out principles and responsibilities for the broader environment and circumstances in which research is carried out and in which researchers, research students, technicians, professional services staff and others practice and develop their professional skills - known as 'research culture'.

The aim of the Concordat is to safeguard and enhance the quality of research and its ethical standards. The intent is that implementation of the Concordat should: lead to better quality research and more reliable data/findings/conclusions/evidence; help protect research participants and patients; help maintain and enhance ethical and professional

standards; help improve research culture; and help safeguard public trust in research and in researchers. It sets out basic principles and standards for research but also encourages individuals and organisations to engage in self-reflection and go beyond them.

The first edition of the Concordat was written very much with higher education institutions in mind. While this emphasis can still be seen to a certain degree in the second edition, the document is applicable to all types of research organisation. Its precise implementation will vary according to the particular type of organisation, but this is inherently acknowledged in the design of the Concordat and in that of this Self-Assessment Tool. Indeed, the Concordat recognises that the process of implementation will vary somewhat between all research organisations, due to the particular needs of their individual research environments.

The Concordat is a pan-disciplinary document, covering all areas of research from the arts and humanities to health and biomedicine. It is not intended to take the place of detailed, disciplinespecific guidance but instead provides overarching principles and standards for the entire disciplinary spectrum. The application of these will vary somewhat depending on the needs of a particular discipline and they will also be particularly useful in interdisciplinary research.

The principles and standards of the Concordat are intended to underpin all aspects of the research process. They are not limited to a particular stage of research; nor is there one stage of research where they warrant particular consideration and can then be 'left in the background' for the remainder of the project. Like research ethics, good research practice is an inherent and fundamental component of all stages of research, from the moment that a research

project is conceived to when the project is completed and disseminated, and researchers move on to their next piece of work.

Structure of the Concordat

The overall structure of the 2019 edition of the Concordat remains the same as its 2012 predecessor. Following an introduction, it sets out five high-level principles for good research practice, called 'commitments' in the text. Each commitment relates to a specific, but broad, area of research practice:

- "Commitment 1: We are committed to upholding the highest standards of rigour and integrity in all aspects of research.
- Commitment 2: We are committed to ensuring that research is conducted according to appropriate ethical, legal and professional frameworks, obligations and standards.
- Commitment 3: We are committed to supporting a research environment that is underpinned by a culture of integrity and based on good governance, best practice and support for the development of researchers.
- Commitment 4: We are committed to using transparent, timely, robust and fair processes to deal with allegations of research misconduct when they arise.
- Commitment 5: We are committed to working together to strengthen the integrity of research and to reviewing progress regularly and openly."

Each is followed by short explanatory text, expanding what the commitment means in practice and listing specific responsibilities relating to it, divided into those for researchers, employers of researchers and funders of research.

A detailed definition of 'research integrity' is provided under Commitment 1 (see The 2019 Concordat: an overview, earlier in this document, and the Appendix), while 'research misconduct' is defined under Commitment 4 (see Appendix). An annexe defines other key terms used in the document.

There is a degree of overlap between the topics of each commitment, with a number of overarching themes present throughout the Concordat. These themes are discussed in this Self-Assessment Tool, under Five themes of the Concordat, and in the selfassessment questions that follow it.

Commitments 1 and 2 both address standards in research practice but with a different focus: the first on the standards of research integrity itself (defined as honesty, rigour, transparency and open communication, care and respect, and accountability); the second on legal, ethical and professional standards. The standards espoused in Commitment 1 can be viewed as principles which researchers should adhere to in their professional practice, while those in Commitment 2 are rules and recommendations set by external bodies or the research community itself that apply to research.

Commitment 4 discusses how to respond to allegations of research misconduct: deliberate or reckless breaches of either set of standards. This commitment does not describe an investigation process for such allegations but sets out broad principles and requirements for: the reporting of concerns about research misconduct; how institutions should listen and respond to those concerns; and their subsequent investigation.

UKRIO recommends that those seeking detailed guidance on how to conduct such investigations, including a step-by-step process, should consult our

Procedure for the Investigation of Misconduct in Research, available from our website.

The topics of Commitments 1, 2 and 4 – 'inherent' standards for research, 'external' standards for research and how to address deliberate breaches of those standards - can be viewed as sitting under the overarching Commitment 3 "Embedding a culture of research integrity".

This ties together the requirements of Commitments 1, 2 and 4, applicable to specific research projects, and builds on them, to discuss principles and responsibilities for ensuring that the environment in which research is carried out is one "...that is underpinned by a culture of integrity and based on good governance, best practice and support for the development of researchers." It takes research integrity from the micro scale of individual research projects to the macro scale of an entire research organisation.

In UKRIO's view, Commitment 3 is trying to embed research integrity - principles and standards of 'good research practice' - as an everyday and essential component of the research organisation as a whole, just as it is for individual research projects. 'Everyday' in the sense that research integrity should not be seen as something 'other' and somehow separate to the normal work of researchers, research students and those that support, teach and manage them. Instead, research integrity - good research practice - is a normal and inherent part of the research process, supported by training and development, leadership and a culture of open discussion.

Research lacking in integrity, i.e. that which fails to meet standards of good research practice, is harmful. Researchers must be able to trust each other's work, and they must also be trusted by society since they provide expertise that may impact lives and wellbeing. Commitment 3 also widens the scope of research integrity activities. 'Research culture' is influenced by a variety of factors and incentives, as described in reports by the Nuffield Council on Bioethics, the Wellcome Trust and Vitae, UKRIO and the UK Reproducibility Network on behalf of UK Research and Innovation. In their work relating to Commitment 3, organisations need to consider the impact of those factors and incentives on their staff, students and research projects, and on the organisation's policies, practices and culture.

Such factors include, but are not limited to: how researchers are recruited, assessed and promoted; workload models; staff development; staff welfare and the impact of bullying and harassment; and the impact, whether positive or negative, of incentives in research, such as those from funders and employers. Addressing these issues requires not only long-term work but also leadership and self-reflection from those in senior positions.

Commitment 5 takes the Concordat beyond the setting of an individual research organisation, looking at the research community as a whole. It cites the need for researchers and research organisations to create the healthy research culture which is the focus of Commitment 3 and exhorts the research community to work together in safeguarding and enhancing good research practice. This is correctly described as work which will be long-term and require openness (for example, via publicly available annual statements on research integrity), collaborative activities and peer learning and discussion. It will also require significant leadership from all in such roles, from supervisors and team leaders to heads of research organisations, funding bodies, publishers and others.

Commitment 5's reporting elements will naturally draw particular attention, given their role in various

compliance/audit mechanisms, but its other elements must not be neglected. The focus is not only on reporting, but also on ongoing reflection and improvement by individuals and organisations:

"Researchers will ensure their own integrity and help to develop a culture of integrity in their groups, departments and institutions...

Employers of researchers will:

- take steps to ensure that their environment promotes and embeds a commitment to research integrity, and that suitable processes are in place to deal with misconduct...
- Periodically review their processes to ensure that these remain fit for purpose

Funders of research will:

- periodically review their policies and grant conditions to ensure that they support good practice in research integrity
- periodically review their processes and practices to ensure that these are not providing inappropriate incentives"

These requirements link Commitment 5 closely with Commitment 3 (research culture) and commit the research community to the long-term work needed to safeguard and enhance good research practice.

This focus on long-term work is also reflected in Commitment 5's requirements for reporting. Every year, institutions must produce a short annual statement detailing their research integrity activities, "which must be presented to their own governing body, and subsequently be made publicly available, ordinarily through the institution's website."

Produced on an annual basis, these statements are a clear opportunity for institutions to demonstrate their

ongoing work on safeguarding and enhancing good research practice. A series of annual statements will be able to show how an institution has continually developed its practices, policies and culture to support research integrity, as well as highlighting lessons learned and signposting future areas of activity.

The next section of this document makes some suggestions on the content of institutional annual research integrity statements.

A high-level document

A strength of the Concordat, but one that can be seen as a potential weakness, is its high-level nature. It sets out five broad principles - 'commitments' - for safeguarding and enhancing good research practice. While each is further defined through short lists of responsibilities for particular elements of the research community, the result is standards that remain wideranging and general in their nature, rather than detailed and practical.

This high-level nature allows the Concordat and its standards to be applicable to all disciplines and types of research, to all types of researcher and research organisation. However, institutions should supplement the Concordat's high-level standards with their own bespoke and proportionate guidance, designed to be relevant to the research carried out under their auspices.

More detailed guidance would run the risk of being harder to apply to certain areas of research or organisations. If the Concordat were expanded to include sufficiently detailed guidance for every discipline and sector of research, it would lose its concise and accessible nature, which UKRIO considers to be a positive asset.

Most importantly, given the stature of the Concordat Signatories, more detailed standards for research practice would run the risk of inadvertently burdening and constraining researchers and their organisations. Principles for research practice, such as the Concordat's commitments, are not designed as inflexible guidance for researchers but to illustrate the complexities of research and to prompt reflection on the practical and ethical challenges involved.

In UKRIO's experience and that of others, the status of stakeholder organisations can sometimes lead to misperceptions - principles being viewed as something which must be rigidly adhered to, instead of their intended use as an aid to ongoing reflection and improvement.

Due to its high-level nature, the Concordat sensibly avoids suggesting, whether overtly or tacitly, that there is a single 'right way' to carry out research. This should hopefully prevent considerations of research integrity from being reduced to matters of regulatory or contractual compliance, and also avoid burdening researchers with undue constraints or limiting innovative research questions and methodologies.

One document, with many aims

Reading the Concordat, a variety of themes emerge, including:

- Safeguarding and supporting fundamental standards for research – so-called 'good' research practice.
- Promoting so-called 'best' practice, encouraging researchers and organisations to reflect on their practices, and go above and beyond basic standards.
- Helping ensure that legal, ethical, contractual and other requirements for research are met.

- Helping safeguard research participants and retain the public's trust in research.
- Reducing the frequency of errors and mistakes, and of questionable research practices and misconduct/fraud - and helping the research community better address these issues when they do occur.
- Helping ensure that research is underpinned by a healthy research culture, at the institutional and national levels.
- Providing an assurance mechanism for research funders and support national efforts to collect data on research integrity in the UK.

Of course, no document can achieve all of this on its own. The Concordat should be viewed as a tool, and one in a broader toolkit. It is not a panacea but, as part of a wider programme of work, it can be a means to support the conduct of research that is honest, accurate, risk-aware, legal and ethical.

Guidance documents like the Concordat are essential, setting out fundamental principles and standards for research practice. Perhaps more importantly, they can also help to define the particular ethos and values of a research environment – the 'research culture'.

But standards for research cannot work in isolation. They must be supported by appropriate resources: funding, personnel, facilities and structures, policies and processes, training and development, and, in particular, sources of help for researchers.

Organisations must disseminate and promote these standards - whether the Concordat itself or institutional standards that have been informed by the Concordat and other relevant guidance.

How standards are used – and not used – should be monitored proportionately. Comments on the content and utility of the guidance and, in particular,

supporting activities should be sought from all involved. A process of periodic revision and ongoing improvement is essential.

Despite being essential, guidance like the Concordat are but one element of initiatives to sustain and enhance good research practice. If not supported well, the Concordat is likely to be ignored or used in a 'tick box' fashion. Neither outcome is helpful.

Issues of institutional autonomy

The Concordat explicitly recognises that institutions have differing research environments and that implementation of the Concordat will vary according to individual institutional needs. Its high-level principles and standards, while applicable to all disciplines and research sectors, are not a 'one size fits all' mechanism: institutions are encouraged to interpret and implement the Concordat in a way that best suits their research environments.

This recognition of institutional autonomy is an extremely beneficial feature in UKRIO's view, as it gives the guidance flexibility to cover any type of research organisation. However, it also presents three challenges for institutions:

- How to translate the very broad commitments of the Concordat into the everyday practicalities of conducting research at an institution?
- How to make sure such bespoke implementation remains aligned with the Concordat's commitments?
- How to ensure that bespoke implementation of the Concordat still fulfils the requirements of research funders and other external bodies?

As noted previously, this is an ongoing process. Supporting and improving research integrity is longterm work. This is particularly the case when working on topics such as ensuring a healthy research culture and developing strategic and operational leadership on research integrity throughout an institution. It is a process of ongoing reflection and improvement, periodically considering what an institution has been doing and how it can be improved.

Everyday professional practice or contractual compliance?

In the seven years since the publication of the Concordat, those implementing it have often noted an inadvertent tension within the document. As said earlier, the aim of the Concordat is to support and enhance research and research culture, and in turn safeguard public trust in research. This is achieved through long-term implementation of the Concordat within an institution, with compliance overseen by funding bodies.

As with any conditions of funding, there can be inadvertent pressure to focus on 'quick wins' to demonstrate compliance with assurance mechanisms. Any such pressures should of course be resisted. However, just as we should acknowledge that incentives and pressures in research can have a negative impact on researchers, we should accept that there can be inadvertent pressure to demonstrate compliance with the Concordat with a so-called 'tick box' approach.

The Concordat sends a clear message that research integrity is an everyday part of professional practice as a researcher and that a healthy research culture is an essential component of a research organisation. Embedding them within an organisation can only be achieved through implementation of the Concordat as part of a broader commitment to supporting good research practice, and not through focussing primarily

on contractual compliance. A beneficial side effect of a focus on such implementation is that the resulting activities will be more than sufficient to demonstrate that the Concordat is being complied with.

A more sustained and visible approach

The good news is that much of the responsibilities set out in the Concordat are things which individuals and organisations will - or should - be doing already. The question is, how well are they doing them and are there any gaps? This Self-Assessment Tool is specifically designed to provide a means to answer that question and to help organisations to gather information on their research integrity provision.

Having such information is essential, both as part of good governance by research organisations and because interest in, and scrutiny of, matters of research integrity has increased greatly in recent years. There is no room for complacency, as demonstrated by the 2018 enquiry into research integrity by the House of Commons Science and Technology Committee.

Organisations are expected to demonstrate a more sustained and visible approach to supporting good research and a healthy research culture. 'Sustained' in the sense of a more long-term focus but also that the various parts of an organisation should work together to support research integrity. A silo mentality should be avoided and the expertise of a wide range of academic and professional services group should be drawn on to inform the institution's approach. That approach will require careful consideration, as institutions do not have unlimited resources and must decide how best to apply them.

Examples of what a more 'visible' approach to research integrity might look like is discussed in the earlier self-assessment question tables, particularly under Communication and Culture, development and leadership.

Institutions should also consider how visible the Concordat will be in their research integrity work. Will the Concordat be heavily promoted within the organisation or will the focus instead be on institutional standards which have been informed by the Concordat? Either approach can be beneficial, but it is important that staff and students know that your institution has polices and standards and also know that there is a national framework for research integrity, one which is a requirement of funding bodies.

Visibility works both ways. As well as the institution telling staff and students what is expected of them and how they will be supported to achieve those standards, information must flow back to strategic and operational leads on how well the organisation's research integrity provision is working in practice. Does everyone know what they should be doing and what support they can access? How well is that support being delivered and how well are standards being met? Such information will not only drive institutional reflection and ongoing improvement, in turn it is also essential for governance purposes and to respond to external enquiries and scrutiny.

Increased scrutiny driving change

Scrutiny of research integrity issues has grown considerably in recent years. There has been significant interest in whether standards for good research practice are being met by researchers and in exploring the effects of research culture on quality and ethical standards in research.

This scrutiny has not been limited to any one country and the issues have been examined by a wide range of organisations and commentators, both nationally and globally. In the UK, an enquiry by the House of Commons Science and Technology Committee, reporting in 2018, carried out an in-depth examination of the UK research integrity landscape. Its conclusions and recommendations were endorsed by the UK Government and major research funders, and have driven change and necessary improvement in the research community.

Its report set out a number of major concerns, for example about the handling of research misconduct allegations; gaps in compliance with the Concordat; that how we fund, monitor, assess and disseminate research can sometimes inhibit high quality research rather than encourage it; and concerns about transparency in research, particularly regarding clinical trials.

The Committee also noted that a large amount of good work is being done in the UK - for example, its report praised the work of our charity, stating that "UKRIO should continue its work in providing advice on research integrity and sharing best practice" and that "[t]he default assumption for all universities should be that they are subscribers to UKRIO." But there is no room for complacency, especially if we in the research community wish to retain public trust in research.

Fortunately, the Select Committee's conclusions and other recent developments, in the UK and internationally, have given a renewed focus to work on research integrity – for example, it lead to the revision of the Concordat and the establishment of the UK Committee on Research Integrity. Now is the time to build on that existing good work and do more, correcting any gaps in provision.

A key lesson from the unique expertise UKRIO has accrued since our inception in 2006, is that a compliance culture in relation to research integrity will only take the research community so far. The key would seem to be culture and leadership - and leadership not only at the top of organisations but also within them: heads of department, managers and principal investigators, supervisors, those who train and mentor early-career researchers, etc. This is longterm work, which can be guided by the commitments of the Concordat, assisted by this Self-Assessment

In closing, there are five broad questions to consider:

- What challenges do researchers face when trying to do high quality, ethical research?
- What do researchers need to help overcome these challenges?
- What can researchers do themselves and what support must institutions - research organisations, funders, publishers and others provide?
- How do we want to improve research culture: what needs to be changed, and how?

The answers to these will vary between organisations, between disciplines, between career stages of researchers, etc. However, those answers will also share some common themes and can be a starting point to prompt reflection about research integrity and the challenges involved in supporting good research practice, and in turn inform subsequent implementation of the Concordat.

UKRIO welcomes enquiries from individuals and organisations on the implementation of the Concordat. In addition, we provide a wide range of support and services relating to the Concordat for our subscriber institutions. Please contact us for more information.

The impact of the pandemic

The ongoing pandemic has had a huge impact on the health, wellbeing and working practices of those involved in in research and, of course, of society as a whole. It has also had considerable effects on how research is designed, funded, conducted, managed, monitored and disseminated.

These effects will be long-lasting and dependent on the level of infection control measures, and the need to consider how these effects will impact on the integrity of research will remain for many months.

- How do we help researchers and others think about what challenges and problems might affect the integrity of their research and consider how to address them?
- How can organisations best support their staff and students in these challenging times?
- What has been the impact on research culture? How do we mitigate against any negative impacts? And have there been any changes in working practices which it would be beneficial to retain in a post-pandemic world?

The research community has been considering these questions since the onset of the pandemic. A wide variety of resources have emerged, from research organisations, funders, publishers and others, and UKRIO would recommend their consideration.

Our own Recommended Checklist for Research Communities During the COVID-19 Pandemic is designed to help researchers and others think about what challenges and problems might affect the integrity of their research and how to address them. It can also be used by organisations, to consider the challenges that may be affecting research conducted

by their staff and students, and how to develop mitigation strategies.

UKRIO's advice and guidance service is also available to provide support. Please contact us for more information.

The Concordat (2019) requires that institutions make an annual statement to their governing body on the actions they have undertaken to sustain and further enhance integrity in their research. It also requires that institutions make their statements public.

The annual statement is a valuable opportunity for internal review and reflection. Equally, it is an opportunity to demonstrate publicly a commitment to high quality and ethical research, by declaring the practical measures which an institution has undertaken to enhance research integrity. When read as a series, an institution's annual statements should illustrate how it has continually developed its support for good research practice over time.

Drawing on UKRIO's extensive experience, and feedback from institutions and researchers, this section suggests possible content for the annual statement. As noted earlier, the self-assessment tool should not be seen as prescriptive. Accordingly, this section is intended as a guide to inform the drafting of an annual statement in line with the requirements of the Concordat (see text box, below).

Like the rest of this document, this annex will be revised as the implementation of the Concordat evolves. UKRIO welcomes enquiries from institutions seeking advice on the content of their annual statements and is happy to assist its subscribers in drafting them.

Commitment 5: Strengthening Research Integrity, The Concordat to Support Research Integrity (2019):

"Employers of researchers will ...produce a short annual statement, which must be presented to their own governing body, and subsequently be made publicly available, ordinarily through the institution's website. This annual statement must include:

- a summary of actions and activities that have been undertaken to support and strengthen understanding and the application of research integrity issues (for example postgraduate and researcher training, or process reviews)
- a statement to provide assurance that the processes the institution has in place for dealing with allegations of misconduct are transparent, timely, robust and fair, and that they continue to be appropriate to the needs of the organisation
- a high-level statement on any formal investigations of research misconduct that have been undertaken, which will include data on the number of investigations. If no formal investigation has been undertaken, this should also be noted
- a statement on what the institution has learned from any formal investigations of research misconduct that have been undertaken, including what lessons have been learned to prevent the same type of incident re-occurring
- a statement on how the institution creates and embeds a research environment in which all staff, researchers and students feel comfortable to report instances of misconduct

...To improve transparency, a link to the statement should be sent to the secretariat of the signatories to the concordat."

Writing the annual report

Structure: in general terms, the annual statement should follow the structure laid out in Commitment 5 of the Concordat, shown on the previous page. Of the five bullet points listed in the extract:

- The first ("a summary of actions and activities...") covers supporting research integrity/ good research practice in general terms and relates to Commitments 1, 2, 3 and 5.
 - Matters of research culture and institutional leadership and strategy on research integrity issues are not specifically listed in the five bullet points. However, given the fundamental importance of these issues, which relate primarily to Commitments 3 and 5, we recommend that information on activities relating to research culture and leadership must be included in the annual statement.
- The remaining four ("a statement to provide assurance..." to "a statement on how the institution creates and embeds...") cover processes to report and investigate allegations of research misconduct, and data from investigations and their outcomes. These relate to Commitment 4 and also to Commitment 3, the latter in ensuring that researchers feel comfortable to report allegations of misconduct.

While four of the five bullet points relate to research misconduct, we feel strongly that this should not dictate the proportion of content within the annual statement. Instead, there should be at least as much content relating to supporting research integrity, including research culture, as there is on matters relating to research misconduct.

Drawing on the above, our suggested structure for the annual statement would be:

- Introduction (including the 'essential information' given below)
- Supporting and strengthening research integrity, including research culture and leadership
- Addressing research misconduct

Within that broad structure, institutions have considerable scope to describe activities undertaken, 'lessons learned' and plans for the future. Some suggestions on content are made later in this section, but these should be seen as a starting point rather than prescriptive. Activities relating to all of the Commitments of the Concordat should be listed, with each activity referencing which Commitment(s) are being addressed.

Annual statements should include a summary of any actions taken to safeguard and support research integrity relating to researchers and projects supported by particular funding bodies. These can either be included in the suggested structure given above or in an additional section specifically for funder-related activities.

Essential information: annual statements should state the date on which the institution's governing body approved the document and the date on which it was made publicly available. For version control purposes, the dates of any amendments to the statement and a brief description should be listed at the end of the document.

Each annual statement should include a link to the previous statement and to any earlier ones referred to in the text. This could either be direct links or a link to a web page that hosts all previous annual reports.

As readers may have questions about the statement, it should also include contact details for persons who can receive requests for clarification or further information. This could be direct email links or a link to the research integrity section of the institution's website.

Period covered: the statement should ideally cover the academic year, rather than the calendar or financial year.

Scope: the annual statement should provide a brief but wide-ranging summary of activities undertaken to support research integrity, including addressing any allegations of misconduct.

The report should **not** be limited to activities which relate specifically to the implementation of the Concordat, let alone to those which relate only to compliance with the Concordat (or with other guidance) as a condition of grant. The scope should be wider, covering all institutional activities to safeguard and enhance good research practice.

This is not to diminish the importance of contractual and other mandatory standards. The annual statement can certainly be used to demonstrate that these are being met, in particular the 'responsibilities of employers of researchers' listed in the Concordat. However, it can - and, in UKRIO's view, must - also demonstrate a broader commitment to the promotion of research integrity.

If for any reason a contractual or other required standard is not being met, the report should contain a brief summary of what is being done to address this and a proposed completion date. For example: "The publicly accessible web link to our research integrity policies and the named person for receiving allegations of misconduct is not yet in place. This will be rectified by the beginning of the next semester."

It may be challenging to summarise a year's worth of research integrity support in a brief and accessible form. However, merely listing activities undertaken should be avoided. It would be helpful to say not only what has been done, but also the reasons for actions taken, the outcome and potential or planned next steps. For example: "Drawing on lessons learned from a recent investigation of research misconduct, we have undertaken additional activities to raise awareness of the sources of help on research practice and ethics available to researchers. Downloads of relevant policies and visits to our institutional research integrity web pages subsequently increased. We will follow up with further promotion of relevant training resources and sources of advice."

The annual statement is also an opportunity to highlight how existing measures and previous actions are being built upon or further developed. As successive annual statements are published by an institution, we feel it would be helpful if they had a strong focus on new measures and significant changes to existing measures, rather than simply echoing what has gone before.

Previous statements should remain available on the institution's website and be linked to in new statements. We recommend that institutions check periodically how easy it is to find and access their statements on their website. For example, can it be found easily when using an internet search engine and search terms that a member of the public with no research experience might use? How easy is it to find the statement using such search terms in the institutional website's search facility? Is the statement itself presented in an accessible format and with the option to be downloaded?

Suggested content: supporting and strengthening research integrity

Evidence of how your institution is implementing the commitments of the Concordat, including compliance with its 'responsibilities of employers of researchers'. For example:

- An overview of your institution's strategy and objectives to strengthen understanding and support of research integrity.
- How research integrity is recognised in the institution's research strategy and who has strategic and operational responsibility for putting this into practice.
- How does the institution communicate the standards and ethos which it wishes to underpin its culture of research?
- How does the institution ensure that those standards and ethos are reflected in its research policies, practices and decision-making?
- How do the central research departments and committees work with faculties, schools, professional services departments and others to embed a healthy research culture?
- Introduction or revision of research integrity policies and procedures, requirements, process reviews or support mechanisms.
- Revision of related institutional systems (e.g. financial audit process or whistleblowing policy).
- Inclusion of relevant external requirements and guidance into institutional processes.
- Any activities to capture the interest of researchers in research integrity, from students

- and early-career researchers to senior researchers and institutional leaders.
- Any activities to seek feedback on the institution's research culture, including the views of researchers and others involved in its research.
- Any formal and informal initiatives and networks to provide information, resources and support to researchers and professional services staff, and/or to encourage them to support each other and share best practice.
- A summary of your education and training provision, including the audiences that have been reached and any new activities.
- Any activities to mitigate the negative impact of incentives in research on their researchers and research projects, and on the organisation's policies, practices and research culture.
- Any activities relating to mitigating negative impacts on research integrity from: how researchers are recruited, assessed and promoted; research assessment; workload models; staff development; staff welfare and the impact of bullying and harassment.
- How equality, diversity and inclusion has been supported in your research integrity strategy and activities.
- How sustainability has been taken account of in your research integrity strategy and activities.
- A description of your processes and actions relating to continuing improvement and revision relating to research integrity, including summary information from any relevant internal monitoring or audit processes.

- Summary of outcomes of any external inspections/audits relating to research integrity.
- Any other activities undertaken to fulfil your institution's strategy and objectives to support research integrity and a healthy research culture.
- Public engagement and impact activities conducted by your institution, particularly involving research participants or patients, which included coverage of research integrity.
- External conferences, workshops or other events on research integrity to which your institution has contributed.
- Information on any academic research into research integrity or related fields, such as research ethics or research culture, undertaken by researchers from your institution.
- Collaborations with external organisations to support and strengthen understanding and application of research integrity issues, whether UK-based institutions or those from other countries.
- Regional, national or international initiatives on research integrity which your institution has contributed to or participated in.
- Membership of, or collaborations with, organisations with a particular interest in research integrity and related issues, such as the UK Research Integrity Office.

Please note that activities listed should not be limited to those covering the entire institution and its researchers. Those which focus on particular sections of the organisation, particular types of research or researchers, and so on, are just as relevant.

Suggested content: addressing research misconduct

Confirmation that:

- Your institution has processes for the reporting and investigating of allegations of research misconduct.
- Mechanisms for the reporting of allegations are clear, well-articulated and confidential, and include a named point of contact and/or a recognised appropriate third party to act as confidential liaison for those raising concerns.
 - Any additional measures taken to encourage the reporting of concerns by students, earlycareer researchers, research participants and the public should also be listed.
- The process has appropriate principles and mechanisms to ensure that investigations are thorough and fair, carried out in a transparent and timely manner, and protected by appropriate confidentiality provisions.

Brief, anonymised summary data on any formal investigations conducted by your institution into allegations of research misconduct. . UKRIO defines a 'formal investigation' as 'that part of the [research misconduct investigation] Procedure which is intended to examine the allegations of misconduct in research, hear and review the evidence and determine whether the alleged misconduct occurred, take a view on who was responsible, and which may make recommendations as to any response that the Organisation might make. The Formal Investigation will be preceded by [a] Screening Stage'. (Source: UKRIO Procedure for the Investigation of Misconduct in Research)

- Number of allegations received during the past year and how many then proceeded to a formal investigation.
- Number of formal investigations undertaken in the past year, including:
 - How many allegations were upheld in full or in part?
 - How many allegations were dismissed?
 - The number of ongoing investigations.
- A breakdown of the number of formal investigations undertaken in the past year:
 - By discipline.
 - By the broad type of misconduct that was alleged. For example, fabrication/ falsification, plagiarism or failure of duty of care to research participants.
 - For allegations relating to research that is externally funded, a breakdown by funding body.

Please note that:

- Specific allegations/ investigations and the individuals and research projects concerned should not be identifiable from this data. This may be particularly challenging in some circumstances, e.g. for small and/or specialist institutions, and it may be helpful to seek advice from UKRIO.
- Regarding the number of allegations received, formal investigations undertaken, how many allegations were upheld or dismissed, and the breakdowns by discipline, type and funder, it is UKRIO's view that there is no 'right' or 'wrong' answer as long as the data provided is accurate.

This has been echoed by other bodies with interests in this area.

A note confirming that the institution fulfilled any requirements to make reports to external bodies, including regulatory and professional bodies, regarding the initiation or completion of a formal investigation. In our view, there is no need to provide additional information in the annual statement, simply to confirm that the institution has met its obligations. External bodies may require additional confirmation separately from the annual statement, for example via their assurance or audit processes.

A short summary of key learning points from concluded investigations and subsequent actions taken. For example: revision of systems or policies, training on particular aspects of the research process, improvements to communication of expected standards, and other actions to improve research standards or help prevent misconduct from occurring.

An overview of any improvements to reporting mechanisms or investigation processes relating to allegations of misconduct should also be given. It should be noted that 'lessons learned' can include improvements and positive change and are not limited to preventative measures.

Please note that it is not suggested that disciplinary or other actions taken in relation to specific individuals are listed. However, if the institution has previously made any public statements that mentioned such actions, these could be linked to.

A note on funder-specific activities

As part of their annual statement, institutions should provide a summary of any actions taken to safeguard and support research integrity relating to researchers and projects supported by particular funding bodies.

These may relate to: supporting and strengthening research integrity, including research culture and leadership; and/or addressing research misconduct.

When considering the structure of their annual statements, institutions should decide whether they will list funder-specific activities in their own section or as subsets of relevant general activities. As an example of the latter approach, a description of 'generic' training and development activities could be followed by a summary of training provided for researchers supported by a particular funder.

Closing thoughts

While the Concordat sets out mandatory content for annual statements, this section has set out ideas for potential content which you may wish to consider including in your institution's statement.

Annual statements are about reflecting on the positive steps you have taken to support good research practice and a healthy research culture at your institution, as well as being open about any lessons learned from challenges and problems. Supporting research integrity is long-term work; it is ok to state that initiatives are still ongoing or delayed, and outputs from smaller activities are just as worth highlighting as those from huge projects.

While drafting an annual statement for the first time might seem somewhat daunting, they are a valuable opportunity for both internal review and reflection, and also to demonstrate publicly a commitment to good research practice and a healthy research culture. UKRIO welcomes enquiries from institutions seeking advice on the content of their annual statements and is happy to assist its subscribers in drafting them.

Acknowledgements

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Conceptualisation:

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Competing Interests

JP, NS and JW are employees of UKRIO.

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Please note that reviewers commented in their individual capacities and therefore this listing does not necessarily indicate that these institutions endorse this publication.

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Please note that reviewers commented in their individual capacities and therefore this listing does not necessarily indicate that these institutions endorse this publication. Affiliations were correct at the time of publication of the 2014 edition of the Self-Assessment Tool.

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https://www.universitiesuk.ac.uk/sites/default/files/field /downloads/2021-08/Updated%20FINAL-theconcordat-to-support-research-integrity.pdf (2019 edition)

Please note that this self-assessment tool was developed independently by UKRIO. It does not necessarily represent the views of the Concordat's authors or signatories, nor is it endorsed or warranted by them and/or their employers.

Further reading

ALLEA - All European Academies, 2017. The European Code of Conduct for Research Integrity: Revised Edition. Available from: https://allea.org/wpcontent/uploads/2017/05/ALLEA-European-Code-of-Conduct-for-Research-Integrity-2017.pdf

Association of Research Managers & Administrators and UK Research Integrity Office, 2020. Research Ethics Support and Review in Research Organisations. Available from: https://ukrio.org/publications/

Committee on Publication Ethics, 2012. Cooperation between research institutions and journals on research integrity cases: guidance from COPE. Available from:

https://publicationethics.org/files/Research_institutions guidelines final 0 0.pdf

Declaration on Research Assessment, 2012. San Francisco Declaration on Research Assessment. Available from: https://sfdora.org/read/

House of Commons Science and Technology Committee, 2018. Research Integrity. Available from: https://publications.parliament.uk/pa/cm201719/cmsel ect/cmsctech/350/35002.htm

NHS Health Research Authority et al., 2020. UK Policy Framework for Health and Social Care Research. Available from:

https://www.hra.nhs.uk/planning-and-improvingresearch/policies-standards-legislation/uk-policyframework-health-social-care-research/

Nuffield Council on Bioethics, 2014. The Culture of Scientific Research in the UK. Available from: https://www.nuffieldbioethics.org/publications/theculture-of-scientific-research

Office of the Independent Adjudicator for Higher Education, 2016. The Good Practice Framework: Handling Complaints and Academic Appeals. Available from:

https://www.oiahe.org.uk/media/1859/oia-goodpractice-framework.pdf

Royal Society and UK Research Integrity Office, 2018. Integrity in Practice. Available from: https://ukrio.org/publications/

Science Europe, 2015. Research Integrity: What it Means, Why it Is Important and How we Might Protect it. Available from:

https://www.scienceeurope.org/media/dnwbwaux/brief ing_paper_research_integrity_web.pdf

UK Research Integrity Office, 2008. Procedure for the Investigation of Misconduct in Research. Available from: https://ukrio.org/publications/

UK Research Integrity Office, 2009 and 2021. Code of Practice for Research. Available from: https://ukrio.org/publications/

UK Research Integrity Office, 2020. Recommended Checklist for Research Communities During the COVID-19 Pandemic. Available from:

https://ukrio.org/publications/

UK Research Integrity Office, 2021. Collated external research integrity resources. Available from:

https://ukrio.org/research-integrityresources/research-integrity-resources/

Universities UK et al., 2019. The Concordat to Support Research Integrity. Available from:

https://www.universitiesuk.ac.uk/topics/research-andinnovation/concordat-research-integrity

Further reading

Vitae, 2019. The Concordat to Support the Career Development of Researchers. Available from: https://www.vitae.ac.uk/policy/concordat

Vitae, UK Research Integrity Office and UK Reproducibility Network, 2020. Research integrity: a landscape study. Available from:

https://www.ukri.org/wpcontent/uploads/2020/10/UKRI-020920-ResearchIntegrityLandscapeStudy.pdf

Wellcome Trust, 2020. What Researchers Think About the Culture They Work In. Available from: https://wellcome.org/reports/what-researchers-thinkabout-research-culture

World Conferences on Research Integrity, 2010. Singapore Statement on Research Integrity. Available from: https://wcrif.org/guidance/singapore-statement

World Conferences on Research Integrity, 2013. Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations. Available from: https://wcrif.org/documents/354-montreal-statementenglish/file

World Conferences on Research Integrity, 2017. Amsterdam Agenda. Available from: https://wcrif.org/guidance/amsterdam-agenda

World Conferences on Research Integrity, 2019. Hong Kong Principles for assessing researchers. Available from: https://wcrif.org/guidance/hong-kong-principles

World Medical Association, 1964-2013. Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects. Available from: https://www.wma.net/policies-post/wma-declarationof-helsinki-ethical-principles-for-medical-researchinvolving-human-subjects/

The Concordat underwent significant revision prior to the publication of its second edition in October 2019. This section summarises some of the key changes in the 2019 Concordat compared to its 2012 predecessor.

Please note that it does not summarise every change between the two editions. The shaded text in the 2019 version indicates where text was added and/or replaced in the 2012 version. While retaining the overall structure of the first edition - the five commitments of research integrity - the Concordat was edited throughout for clarity of language. As a result, a comparison of the entire texts of the two documents is of limited value and could be misleading.

For obvious reasons, the best way to understand the changes and new provisions of the revised Concordat is to scrutinise it carefully. UKRIO recommends careful consideration of the 2019 edition of the Concordat, which can be accessed via Universities UK's website.

To supplement such scrutiny of the 2019 edition, this section summarises changes to the following key elements of the Concordat:

- Definition of research integrity.
- Definition of research misconduct.
- Specific responsibilities required of researchers.
- Specific responsibilities required of employers of researchers.
- Specific responsibilities required of funders of research.

Commitment to the new Concordat and period of implementation

As noted earlier, employers of researchers must demonstrate their commitment to the 2019 edition of the Concordat by 25 October 2020. By that time they must, according to the Universities UK website, have as a minimum:

- Identified a named point of contact who will act as a first point of contact for anyone wanting more information on matters of research integrity and ensured that contact details for this person are kept up to date and are publicly available on the institution's website (page 11 of the Concordat).
- Provided a named point of contact or a recognised and appropriate third party to act as confidential liaison for whistle-blowers or any other person wishing to raise concerns about the integrity of research being conducted under their auspices (page 14 of the Concordat).
- Published an annual statement on how they are meeting the requirements of the revised concordat (page 16 of the Concordat).

UKRIO recommends careful and regular scrutiny, of both Universities UK's website and the research integrity and related policies of funders, to ensure that institutions are aware of any changing requirements.

On the following pages, the shaded text in the 2019 version indicates where text was added and/or replaced compared to the 2012 version.

Definition of research integrity

2019 (current) edition	2012 (previous) edition
Honesty in all aspects of research, including in the	honesty in all aspects of research, including in the
presentation of research goals, intentions and	presentation of research goals, intentions and
findings; in reporting on research methods and	findings; in reporting on research methods and
procedures; in gathering data; in using and	procedures; in gathering data; in using and
acknowledging the work of other researchers; and in	acknowledging the work of other researchers and in
conveying valid interpretations and making justifiable	conveying valid interpretations and making justifiable
claims based on research findings.	claims based on research findings.
	Discount for the second
Rigour, in line with prevailing disciplinary norms and	Rigour, in line with prevailing disciplinary norms and
standards, and in performing research and using	standards: in performing research and using
appropriate methods; in adhering to an agreed	appropriate methods; in adhering to an agreed
protocol where appropriate; in drawing interpretations	protocol where appropriate; in drawing interpretations
and conclusions from the research; and in	and conclusions from the research; and in
communicating the results.	communicating the results.
Transparency and open communication in	Transparency and open communication in
declaring potential competing interests; in the	declaring conflicts of interest; in the reporting of
reporting of research data collection methods; in the	research data collection methods; in the analysis and
analysis and interpretation of data; in making research	interpretation of data; in making research findings
findings widely available, which includes publishing or	widely available, which includes sharing negative
otherwise sharing negative or null results to recognise	results as appropriate; and in presenting the work to
their value as part of the research process; and in	other researchers and to the general public.
presenting the work to other researchers and to the	
public.	
Care and respect for all participants in research, and	Care and respect for all participants in and subjects
for the subjects, users and beneficiaries of research,	of research, including humans, animals, the
including humans, animals, the environment and	environment and cultural objects. Those engaged with
cultural objects. Those engaged with research must	research must also show care and respect for the
also show care and respect for the integrity of the	stewardship of research and scholarship for future
research record.	generations.
Accountability of funders, employers and	
researchers to collectively create a research	
environment in which individuals and organisations	
are empowered and enabled to own the research	
process. Those engaged with research must also	
process. Those origages with resocion must also	

2019 (current) edition	2012 (previous) edition
ensure that individuals and organisations are held to	
account when behaviour falls short of the standards	
set by this concordat	

Definition of research misconduct

2019 (current) edition	2012 (previous) edition
fabrication: making up results, other outputs (for example, artefacts) or aspects of research, including documentation and participant consent, and presenting and/or recording them as if they were real falsification: inappropriately manipulating and/or selecting research processes, materials, equipment, data, imagery and/or consents	fabrication: making up results or other outputs (e.g., artefacts) and presenting them as if they were real falsification: manipulating research processes or changing or omitting data without good cause
plagiarism: using other people's ideas, intellectual property or work (written or otherwise) without acknowledgement or permission	plagiarism: using other people's material without giving proper credit
 failure to meet: legal, ethical and professional obligations, for example: not observing legal, ethical and other requirements for human research participants, animal subjects, or human organs or tissue used in research, or for the protection of the environment breach of duty of care for humans involved in research whether deliberately, recklessly or by gross negligence, including failure to obtain 	failure to meet ethical, legal and professional obligations: for example failure to declare competing interests; misrepresentation of involvement or authorship; misrepresentation of interests; breach of confidentiality; lack of informed consent; misuse of personal data; and abuse of research subjects or materials
 appropriate informed consent misuse of personal data, including inappropriate disclosures of the identity of research participants and other breaches of confidentiality improper conduct in peer review of research proposals, results or manuscripts submitted for publication. This includes failure to disclose conflicts of interest; inadequate disclosure of clearly limited competence; misappropriation of the content of material; and breach of 	

2019 (current) edition	2012 (previous) edition
confidentiality or abuse of material provided in	
confidence for the purposes of peer review	
misrepresentation of:	
 data, including suppression of relevant 	
results/data or knowingly, recklessly or by gross	
negligence presenting a flawed interpretation of data	
 involvement, including inappropriate claims to 	
authorship or attribution of work and denial of	
authorship/attribution to persons who have	
made an appropriate contribution	
 interests, including failure to declare competing 	
interests of researchers or funders of a study	
 qualifications, experience and/or credentials 	
 publication history, through undisclosed 	
duplication of publication, including undisclosed	
duplicate submission of manuscripts for	
publication	
improper dealing with allegations of misconduct:	improper dealing with allegations of
failing to address possible infringements, such as	misconduct: failing to address possible
attempts to cover up misconduct and reprisals against	infringements such as attempts to cover up
whistle-blowers, or failing to adhere appropriately to	misconduct and reprisals against whistleblowers.
agreed procedures in the investigation of alleged	
research misconduct accepted as a condition of	
funding. Improper dealing with allegations of misconduct	
includes the inappropriate censoring of parties through	
the use of legal instruments, such as non-disclosure	
agreements	

Responsibilities of researchers

Concordat Commitment	2019 (current) edition	2012 (previous) edition
1. Maintaining the highest standards	Researchers are responsible for: understanding the expected standards of rigour and integrity relevant to their research maintaining the highest standards of rigour and integrity in their work at all times	Researchers will: understand the expected standards of rigour and integrity relevant to their research maintain the highest standards of rigour and integrity in their work at all times
2. Ethical, legal and other frameworks	comply with ethical, legal and professional frameworks, obligations and standards as required by statutory and regulatory authorities, and by employers, funders and other relevant stakeholders ensure that all their research is subject to active and appropriate consideration of ethical issues	ensure that all research is subject to active and appropriate consideration of ethical issues comply with ethical, legal and professional frameworks, obligations and standards as required by statutory and regulatory authorities, and by employers, funders and other relevant stakeholders
3. Research culture	Researchers will: • (*) take responsibility for keeping their knowledge up to date on the frameworks, standards and obligations that apply to their work	Note (*): similar wording appeared in the accompanying text for Commitment 3 in the 2012 Concordat. In the 2019 Concordat, it has been highlighted as an explicit responsibility of researchers and its wording has been modified.

Concordat Commitment	2019 (current) edition	2012 (previous) edition
	 collaborate to maintain a research environment that encourages research integrity design, conduct and report research in ways that embed integrity and ethical practice throughout 	
4. Dealing with research misconduct	Researchers will: act in good faith with regard to allegations of research misconduct, whether in making allegations or in being required to participate in an investigation, and take reasonable steps, working with employers as appropriate, to ensure the recommendations made by formal research misconduct investigation panels are implemented handle potential instances of research misconduct in an appropriate manner; this includes reporting misconduct to employers, funders and professional, statutory and regulatory bodies as circumstances require declare and act accordingly to manage conflicts of interest	Researchers will: act in good faith with regard to allegations of research misconduct, whether in making allegations or in being required to participate in an investigation handle potential instances of research misconduct in an appropriate manner; this includes reporting misconduct to employers, funders and professional, statutory and regulatory bodies as circumstances require
5. Strengthening research integrity	Researchers will ensure their own integrity and help to develop a	

Concordat Commitment	2019 (current) edition	2012 (previous) edition
	culture of integrity in their groups, departments and institutions.	

Responsibilities of Employers of Researchers

Concordat Commitment	2019 (current) edition	2012 (previous) edition
1. Maintaining the highest standards	 Employers of researchers are responsible for: maintaining a research environment that develops good research practice and embeds a culture of research integrity, as described in commitments 2 to 5 supporting researchers to understand and act according to expected standards, values and behaviours defending researchers when they live up to the expectations of this concordat in difficult circumstances demonstrating that they have procedures in place to ensure that research is conducted in accordance with standards of best practice; systems to promote research integrity; and transparent, robust and fair processes to investigate alleged research misconduct 	Employers of researchers are responsible for: • collaborating to maintain a research environment that develops good research practice and nurtures a culture of research integrity, as described in commitments 2 to 5 • supporting researchers to understand and act according to expected standards, values and behaviours, and defending them when they live up to these expectations in difficult circumstances
2. Ethical, legal and other frameworks	 have clear policies on ethical review and approval that are available to all researchers make sure that all researchers are aware of, and understand 	Employers of researchers are responsible for: • having clear policies on ethical approval available to all researchers

Concordat Commitment	2019 (current) edition	2012 (previous) edition
	policies and processes relating to ethical approval support researchers to adopt best practice in relation to ethical, legal and professional requirements have appropriate arrangements in place through which researchers can access advice and guidance on ethical, legal and professional obligations and standards	 making sure that all researchers are aware of and understand policies and processes relating to ethical approval supporting researchers to reflect best practice in relation to ethical, legal and professional requirements having appropriate arrangements in place through which researchers can access advice and guidance on ethical, legal and professional obligations and standards
3. Research culture	 embed these features in their own systems, processes and practices reflect recognised best practice in their own systems, processes and practices implement the concordat within their research environment participate in an annual monitoring exercise to demonstrate that the institution has met the commitments of the concordat promote training and development opportunities to 	 embed these features in their own systems, processes and practices work towards reflecting recognised best practice in their own systems, processes and practices implement the concordat within their research environment Note (*): similar wording appeared in the accompanying text for Commitment 3 in the 2012 Concordat. In the 2019 Concordat, it has been highlighted as an explicit responsibility of employers

Concordat Commitment	2019 (current) edition	2012 (previous) edition
	 research staff and students, and encourage their uptake (*) identify a named senior member of staff to oversee research integrity and ensure that this information is kept up to date and publicly available on the institution's website (*) identify a named member of staff who will act as a first point of contact for anyone wanting more information on matters of research integrity, and ensure that contact details for this person are kept up to date and are publicly available on the institution's website 	of researchers and its wording has been modified.
4. Dealing with research misconduct	 Employers of researchers must: have clear, well-articulated and confidential mechanisms for reporting allegations of research misconduct have robust, transparent and fair processes for dealing with allegations of misconduct that reflect best practice. This includes the use of independent external members of formal investigation panels, and clear routes for appeal (see the references section) 	As part of existing mechanisms and conditions of grant, employers of researchers should already: • have clear, well-articulated and confidential mechanisms for reporting allegations of research misconduct • have robust, transparent and fair processes for dealing with allegations of misconduct that reflect best practice (see Annexe II) • ensure that all researchers are made aware of the relevant contacts and procedures for making allegations

Concordat Commitment	2019 (current) edition	2012 (previous) edition
Concordat Commitment	 ensure that all researchers and other members of staff are made aware of the relevant contacts and procedures for making allegations act with no detriment to whistle-blowers who have made allegations of misconduct in good faith, or in the public interest, including taking reasonable steps to safeguard their reputation. This should include avoiding the inappropriate use of legal instruments, such as non-disclosure agreements take reasonable steps to resolve any issues found during the investigation. This can include imposing sanctions, requesting a correction of the research record and reporting any action to regulatory and statutory bodies, research participants, funders or other professional bodies as circumstances, contractual obligations and statutory requirements dictate take reasonable steps to safeguard the reputation of individuals who are 	 act with no detriment to whistleblowers making allegations of misconduct in good faith provide information on investigations of research misconduct to funders of research and professional and/or statutory bodies as required by their conditions of grant and other legal, professional and statutory obligations support their researchers in providing appropriate information to professional and/or statutory bodies
	exonerated	

Concordat Commitment	2019 (current) edition	2012 (previous) edition
	 provide information on investigations of research misconduct to funders of research and to professional and/or statutory bodies as required by their conditions of grant and other legal, professional and statutory obligations support their researchers in providing appropriate information when they are required to make reports to professional and/or statutory bodies provide a named point of contact or recognise an appropriate third party to act as confidential liaison for whistle-blowers or any other person wishing to raise concerns about the integrity of research being conducted under their auspices. This need not be the same person as the member of staff identified to act as first point of contact on research integrity matters, as recommended 	
	under commitment 3	
5. Strengthening research integrity	(*) take steps to ensure that their environment promotes and embeds a commitment to	The concordat therefore recommends that employers of researchers should present a short annual statement to their own governing body that:

Concordat Commitment	2019 (current) edition	2012 (previous) edition
	research integrity, and that suitable processes are in place to deal with misconduct • (*) produce a short annual statement, which must be presented to their own governing body, and subsequently be made publicly available, ordinarily through the institution's website. This annual statement must include: o a summary of actions and activities that have been undertaken to support and strengthen understanding and the application of research integrity issues (for example postgraduate and researcher training, or process reviews) o a statement to provide assurance that the processes the institution has in place for dealing with allegations of misconduct are transparent, timely, robust and fair, and that they continue to be appropriate to the needs of the organisation o a high-level statement on any formal investigations of research misconduct	 provides a summary of actions and activities that have been undertaken to support and strengthen understanding and application of research integrity issues (for example postgraduate and researcher training, or process reviews) provides assurances that the processes they have in place for dealing with allegations of misconduct are transparent, robust and fair, and that they continue to be appropriate to the needs of the organisation provides a high-level statement on any formal investigations of research misconduct that have been undertaken Note (*): similar wording appeared in the accompanying text for Commitment 5 in the 2012 Concordat. In the 2019 Concordat, it has been highlighted as an explicit responsibility of employers of researchers and its wording has been modified.

Concordat Commitment	2019 (current) edition	2012 (previous) edition
Concordat Commitment	that have been undertaken, which will include data on the number of investigations. If no formal investigation has been undertaken, this should also be noted a statement on what the institution has learned from any formal investigations of research misconduct that have been undertaken,	2012 (previous) edition
	including what lessons have been learned to prevent the same type of incident re-occurring a statement on how the institution creates and embeds a research environment in which all staff, researchers and students feel comfortable	
	 to report instances of misconduct periodically review their processes to ensure that these remain fit for purpose 	

Responsibilities of Funders of Research

Concordat Commitment	2019 (current) edition	2012 (previous) edition
	Funders of research will:	Funders of research expect:
1. Maintaining the highest standards	 publish clear statements of their expectations of researchers and employers of researchers with respect to standards of professionalism and integrity take research integrity into account in the development of policies and processes encourage adoption of the concordat by associating it with their funding conditions 	 researchers to adhere to the highest standards of professionalism and integrity employers of researchers to have procedures in place to ensure that research is conducted in accordance with standards of best practice; systems to promote research integrity; and transparent, robust and fair processes to investigate alleged research misconduct
2. Ethical, legal and other frameworks	To support researchers and employers of researchers, funders of research will: through engagement with the signatories and other stakeholders, explore ways of streamlining their requirements to reduce duplication, inconsistency and/or conflict ensure that their requirements are, through regular review, proportionate, relevant and consistent with the expectations of the concordat (*) incorporate proportionate checks, where appropriate, in the application and award	To support researchers and employers of researchers, funders of research will: • clearly identify any specific codes of practice, legal requirements and other policies that researchers and employers of researchers are expected to comply with • explore ways of streamlining requirements to reduce any duplication and inconsistency • Note (*): similar wording appeared in the accompanying text for Commitment 2 in the 2012 Concordat. In the 2019 Concordat, it has been

Concordat Commitment	2019 (current) edition	2012 (previous) edition
	processes related to legal and	highlighted as an explicit
	ethical requirements	responsibility of funders of
		research and its wording has
	 only provide funding to 	been modified.
	organisations that can	
	demonstrate that appropriate	
	structures are in place to	
	ensure research integrity in	
	their research activities	
	• (*) clearly identify and indicate	
	any specific codes of practice	
	and other policies that	
	researchers and employers of	
	researchers are expected to	
	comply with, beyond those that	
	might be generally expected	
	Funders of research will:	Funders of research are
	 promote adoption of the 	responsible for:
	concordat within the research	promoting adoption of the
	community	concordat within the research
	a company the implementation of	community
	support the implementation of	and the desired and the state of
	the concordat through shared	supporting the implementation
	guidance, policies and plans	of the concordat through
	 identify within their 	shared guidance, policies and
3. Research culture	organisation a senior member	plans
	of staff responsible for	Note (*): similar wording
	oversight of research integrity	appeared in the accompanying
	and ensure that this	text for Commitment 3 in the
	information is publicly	2012 Concordat. In the 2019
	available on the organisation's	Concordat, it has been
	website	highlighted as an explicit
		responsibility of funders of
	identify within their	research and its wording has
	organisation a named lead	been modified.
	contact for research integrity,	

Concordat Commitment	2019 (current) edition	2012 (previous) edition
Consolidat Communiciti	20.0 (ourion) outlon	2012 (providus) cuition
	and ensure that contact details	
	for this person are kept up to	
	date and are publicly available	
	on the organisation's website	
	consider whether their policies	
	and processes create	
	disincentives for the creation	
	and embedding of a positive	
	research culture	
	 work in partnership with 	
	employers and researchers to	
	embed a culture of integrity	
	within the research community	
	,	
	(*) encourage adoption of the	
	concordat by associating it	
	with their funding conditions	
	Funders of research will:	
	runders of research will.	
	 publish clear statements of 	
	what constitutes research	Funders of research will:
	misconduct	
		have clear expectations of
	ensure that recipients of	what constitutes research
	funding are aware of	misconduct
4. Dealing with research	requirements regarding the	ensure that recipients of
misconduct	investigation and reporting of	funding are aware of
	research misconduct, and that	requirements regarding the
	these are openly stated	investigation and reporting of
	 work with employers of 	research misconduct, and that
	researchers to manage	these are openly stated
	funding appropriately,	are openly stated
	including any staff supported	
	by an affected project	
	,	

Concordat Commitment	2019 (current) edition	2012 (previous) edition
	 treat all allegations with confidentiality and abide by data protection laws with respect to data management take appropriate action when research misconduct is reported to them. In the most serious case, this could include funding sanctions or mandatory improvements 	
5. Strengthening research integrity	 Funders of research will: periodically review their policies and grant conditions to ensure that they support good practice in research integrity periodically review their processes and practices to ensure that these are not providing inappropriate incentives 	Likewise, funders of research will periodically review their policies, grant conditions and processes.



UKRIO is an independent charity, offering support to the public, researchers and organisations to further good practice in academic, scientific and medical research. We pursue these aims through our publications on research practice, the support and services we provide to organisations, our education and training activities, and by providing expert guidance in response to requests for assistance.

Since 2006, UKRIO has provided independent, expert and confidential support across all disciplines of research, from the arts and humanities to the life sciences. We cover all research sectors: higher education, the NHS, private sector organisations and charities. No other organisation in the UK has comparable expertise in providing such support in the field of research integrity.

UKRIO welcomes enquiries on any issues relating to the conduct of research, whether promoting good research practice, seeking help with a particular research project, or concerns about alleged fraud and misconduct in research.

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