



July 2025

Commissioned by The UK Committee on Research Integrity and the Research Integrity Concordat Signatories Group

Research Consulting



Executive Summary

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Executive Summary (1/3)

This report, commissioned by the UK Committee on Research Integrity and the Research Integrity Concordat Signatories (RICS) Group, reviews annual statements on research integrity produced by UK higher education institutions (HEIs), government departments and other research organisations for academic years 2022/23 and 2023/24. Building on a <u>previous report</u> published in 2023 and focusing on annual statements produced between academic years 2019/2020 and 2021/2022, this iteration reflects a maturing research integrity landscape across the UK and highlights a series of emerging trends and initiatives through a comprehensive collection of case studies.

Our analysis suggests that research integrity is understood not as a standalone compliance requirement but as an integral component of broader research excellence and institutional culture. We highlight the following key findings:

1. The share of annual statements available to analyse over time is broadly consistent, with 78% found for 2022/23 and 75% for 2023/24. These figures are consistent with the findings of the 2023 report, demonstrating sustained engagement with the UK Concordat to Support Research Integrity. As there is currently no requirement to continue to make publicly available annual statements from previous years, this report provides a snapshot of the annual statements available online by mid-2025, rather than a narrative of what institutions may have published over time.

2. Adoption of the annual statement template was 65% in 2023/24, compared to 46% in 2022/23. This template was commissioned to the UK Research Integrity Office (UKRIO) by the RICS Group in 2022, to support institutional reporting efforts. Although adoption is not mandatory, the increased use of the template has led to higher consistency in the subjects covered in annual statements compared to previous years.

3. A majority of higher education institutions report on misconduct allegations and investigations. **Consistent with the 2023 report, the top three reported reasons for allegations of research misconduct are: failure to meet legal, ethical and professional obligations, followed by plagiarism and misrepresentation.**

4. Annual statements highlight good practice across HEIs in established areas of **research integrity provision.** Practices are often tailored to local contexts; however, there is limited evidence of monitoring or evaluation of effectiveness.

• **HEIs increasingly recognise how research culture at different levels affects research integrity** (e.g. team, department, division, whole institution). Many institutions are integrating culture-focused initiatives into institutional strategic goals and creating dedicated leadership roles. Equality, Diversity, and Inclusion (EDI) are seen as integral components of this discussion.

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- **Research integrity training provision varies significantly in format, delivery and mandatory requirements.** Specifics differ by HEI; however, training is typically required for students and new staff. Expectations for established staff vary more widely, although training is most frequently available regardless of seniority. Evaluation of training available focuses primarily on satisfaction and uptake rather than the impact of the training delivered.
- Formal monitoring and evaluation of the impact of research integrity activities are uncommon across institutions. Annual statements primarily report on activities undertaken rather than assessing outcomes or effectiveness.
- **HEIs demonstrate ongoing efforts to improve practices by learning from experience.** The analysis of annual statement highlights mechanisms like feedback loops on training and ethics processes or the UKRIO self-assessment tool, as well as the socialisation of insights through roles like Research Integrity Champions.

5. HEIs are actively addressing new challenges and developments, in response to a continually changing external landscape.

- Structures, incentives and practices are developing to support transparency and reproducibility beyond open access to publications, with growing integration of FAIR data principles and diverse research outputs.
- The key role of professional services, including technicians, in supporting research integrity is increasingly recognised and leveraged through collaborative structures and integration into integrity initiatives.
- Governance structures, policies and training are developing to support provision around trusted research and international collaboration, often involving inclusion in institutional risk registers, dedicated expertise, and engagement with national resources.
- Dedicated working groups, policy frameworks, cross-institutional collaborations and adaptations of ethics review processes are being put in place to promote responsible use of generative artificial intelligence, with an emphasis on its use in research and scholarly communication.

6. Annual statements produced within government are more streamlined and follow a customised template, which differs from the one used by HEIs. The differences across government departments mean that flexibility is key when supporting research integrity in this context. Importantly, research integrity expectations within government departments consider both internal researchers and external contractors. A distinguishing feature of annual statements produced within government is that these are all available via a single webpage on the UK Government's website, managed by the Government Office for Science.

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7. Annual statements developed by research organisations other than HEIs are typically concise and cover topics similar to those covered by HEIs. This may arise from the fact that the organisations for which we found annual research integrity statements are mostly research-focused, so their thinking is likely to share some commonality with HEIs. Annual statements from non-HEI research organisations are often difficult to locate. This stems from the significant diversity in their management structures, which is reflected in their widely varying website designs and information architecture.

This analysis of annual statements on research integrity reveals a maturing landscape with continued improvement across the UK research ecosystem. Our review highlights several key developments in interconnected areas.

Integrating research integrity into institutional culture: Research integrity is increasingly embedded within broader institutional priorities rather than treated as a standalone area for compliance. This is evidenced by:

- The creation of senior leadership positions focused on research culture and integrity
- Integration of research integrity within strategic objectives
- Recognition of research integrity's contribution to research excellence
- Collaborative approaches involving diverse stakeholders

Strengthening the role of professional services: Professional services are playing an increasingly vital role in fostering research integrity. This is evidenced by:

- Cross-functional teams providing specialised expertise
- Dedicated events and training programmes building awareness and skills
- Recognition of technical staff contributions through initiatives like the Technician Commitment
- Communities of practice facilitating knowledge sharing across disciplinary boundaries

Responding to an evolving landscape: Institutions are developing proactive approaches to address a rapidly evolving landscape. This is evidenced by:

- Governance frameworks and risk management for international research security
- Ethical frameworks and working groups addressing AI applications in research
- Tailored policies reflecting diverse institutional contexts and needs

By building on the solid foundation evident in these annual statements, UK institutions can continue to demonstrate leadership in research integrity while adapting to a rapidly evolving landscape. The future of research integrity in the UK rests not only on alignment with established frameworks and requirements, but on the sector's collective capacity to innovate, collaborate and embed integrity as the cornerstone of research excellence in an increasingly complex external landscape.

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Section 1 Introduction



Context

The <u>UK Committee on Research Integrity</u> promotes and drives research integrity in the UK. Their vision is that the UK's research system continues to be known for its research integrity, which:

- is central to the work and actions of all individuals, groups, and organisations in the research system;
- enhances and protects the quality of research; and
- safeguards confidence in research.

Five principles of research integrity that frame the work of the UK Committee on Research Integrity are taken from <u>The Concordat to Support Research Integrity</u>: honesty, rigour, transparency and open communication, care and respect and accountability. These principles are delivered by individuals, institutions, publishers, funders and other stakeholders working together.

The <u>Research Integrity Concordat Signatories (RICS)</u> <u>Group</u> provides a strategic steering function and is currently made up of <u>Cancer Research UK</u>, the <u>Department for the Economy, Northern Ireland</u>, <u>GuildHE</u> <u>Research</u>, <u>Medr – The Commission for Tertiary Education</u> <u>and Research</u>, the <u>National Institute for Health Research</u>, the <u>Scottish Funding Council</u>, <u>The British Academy</u>, <u>UK</u> <u>Research and Innovation</u>, <u>Universities UK</u> and the <u>Wellcome Trust</u>. The RICS Group is committed to working together to promote and support research integrity through high standards, ethical practices, good governance, fair misconduct procedures and collaborative implementation of the Concordat.

The UK Committee on Research Integrity and the RICS Group have jointly commissioned the present research, which examines annual statements on research integrity following the <u>analysis published in 2023</u>.

Methodology

This work comprised consecutive stages, consistent with the <u>2023 iteration</u> of the analysis:

- With a focus on academic years 2022/23 and 2023/24 or equivalent calendar years, we undertook targeted searches for annual research integrity statements ("annual statements") produced:
 - by <u>higher education institutions that made a</u> submission in the 2021 Research Excellence <u>Framework</u> exercise;
 - by <u>other research organisations</u>, including independent research organisations, public sector research establishments, charitable organisations and cultural institutions;
 - <u>within government</u> (including a mix of ministerial departments, non-ministerial departments, and agencies/other bodies).
- Our first set of searches and analysis took place between January and April 2025 and identified a total of 192 statements, leading to a first draft of the present report. Further searches were run until 13 June 2025, to provide as complete a dataset as possible and reaching the final number of 234 statements analysed for 2022/23 and 2023/24.
- We analysed annual statements via <u>NVivo</u> to tag relevant portions of text that mapped to areas in the annual reporting <u>template</u>. Annual statements identified after the end of April 2025 and pertaining to years 2022/23 or 2023/24 were analysed at a lower level of detail, focusing on aspects that informed the quantitative analysis presented in this report.
- We revisited our data from the <u>2023 report</u> regarding annual statements published for year 2021/22, as previous analysis showed a dip in their availability. We confirmed that this was likely due to publication after our data collection cut-off date for the 2023 report, and have therefore reflected these additional annual statements in the present analysis. These annual statements were analysed at a lower level of detail, focusing on capturing quantitative aspects.

Methodology (continued)	 We explored annual statements via topical deep dives and a further landscape scanning exercise co- designed with a project Advisory Group with members from the UK Committee on Research Integrity and the RICS Group; this sought to highlight key features, best practices and topics that are 'on the radar' of organisations producing annual statements (see sections 3, 4, 5 and 6). We synthesised our evidence in the form of this report, summarising key insights and lessons learned as well as presenting a broad range of examples and case studies.
	We note that the identification of examples and case studies (sections 3, 4, 5 and 6) was completed by human analysts with the support of generative Artificial Intelligence (AI, Claude 3.7 Sonnet). We used generative AI in line with Research Consulting's <u>Policy on the use of</u> <u>artificial intelligence</u> .
Acknowledgements	 This work was supported by a working group, including Tolulope Ayanbola, Irene Fernow and Clare Marchment. An Advisory Group provided expert review and quality assurance and included the following individuals: Sarbani Banerjee (Senior Research Manager - Medr, Commission for Tertiary Education and Research)[†] Hazel McGraw (Senior Policy Analysis Officer - Scottish Funding Council)[†] Miles Padgett (Royal Society Research Professor and Kabia Chain of Natural Philesen built the Cabia of a feature
Individuals marked with a * symbol are members of the UK Committee on Research Integrity, and those marked with a † symbol represent the Research Integrity Concordat Signatories Group.	 Kelvin Chair of Natural Philosophy in the School of Physics and Astronomy - University of Glasgow)[*] Rebecca Veitch (Head of Research Integrity Strategy - UK Research and Innovation)[†] Jeremy Watson (Emeritus Professor of Engineering Systems - University College London)[*]

Limitations

As with the <u>2023 report</u>, the main limitation of this work is the high reliance on analytical judgement and interpretation required in both thematic coding and the co-design of topical deep dives. This was unavoidable due to the features and variability of the annual statements being analysed (e.g. length, style, level of detail, audience); at the same time, said variability was expected and consistent with our previous experience, as we sought to analyse institutions of completely different nature.

As a result, the report focuses on deep dives into notable thematic areas that emerged, as opposed to relying on quantification, so as to avoid incorrect or inappropriate generalisations that may not reflect the diversity of institutions considered. The case studies presented as part of the report seek to showcase the range of institutions whose annual statements we analysed, and reflect examples from all UK countries.

Furthermore, we highlight that this report discusses the contents of all annual statements that could be found between January 2025 and June 2025. Given that, at present, there is no central location for these documents and that they have to be located through manual searches, it is possible that annual statements from some organisations may have been missed.

Section 2

Overview and key considerations

Annual statements

High-level considerations

The availability of annual statement remains stable

Figure 1. Share of annual statements found by year*

* As noted in the methodology, data for 2021/22 has been updated to account for a dip in availability of annual statements detected in our 2023 report. It is likely that data for 2023/24 is also affected by this, due to the analysis cut off date applied (i.e. HEIs may plan to publish their annual statement at a different time in the year). With regard to years 2022/23 and 2023/24, we identified a total of 234 annual statements published by higher education institutions that made a submission in the 2021 Research Excellence Framework exercise. For each year within the scope of our analysis, we were able to collect varying shares of annual statements, which are explored in more detail in the figure below alongside data from our 2023 report. The share of annual statements available to analyse over time is broadly consistent, with 78% found for 2022/23 and 75% for 2023/24 at the time of analysis (Figure 1). Please note that there is currently no requirement that annual statements referring to previous years are kept online by institutions. Although many do so, we cannot comment on cases where only one statement is available on an institutional website. As a result, the percentages shown in Figure 1 represent a snapshot of what can be found online in the first half of 2025 rather than describing what institutions may have published over time.



In addition, we identified:

- annual statements produced within government, totalling 11 for 2022/23 and 10 for 2023/24; and
- annual statements produced by other research organisations, totalling 9 for 2022/23 and 10 for 2023/24.

The remainder of this section covers annual statements produced by higher education institutions, whereas other statements are explored in Sections 5 and 6.

Annual statements

Use of the reporting template by HEIs

Institutions are increasingly adopting the reporting template

Figure 2. Share of higher education institutions using the latest annual reporting template

The use of the reporting template leads to more consistent provision of high-level information In late 2022, the RICS Group commissioned the UK Research Integrity Office (UKRIO) to develop a standard <u>template</u> to support institutions in adhering to their responsibility to publish an annual statement on research integrity.

Although the use of this template is not mandatory, institutions have been increasingly adopting it, with higher figures in 2023/24 (75 out of 115 annual statements; Figure 2) compared to 2022/23 (55 out of 119 annual statements). A consequence of using the template is that annual statements become more uniform and standardised in nature, responding to specific questions raised: this has made the analysis of annual statements more straightforward, owing to the more consistent reporting of topics in specific sections of the template.



In 2023/24, adoption of the latest reporting template has increased significantly.

The structure of the reporting template means that all higher education institutions that make use of it (across both years examined) achieve significant consistency in reporting on administrative information. For example, institutions using the template are consistent in sharing their research integrity website (76%) and whether the document has been signed by a governing body (89%). While these areas are not a measure of the quality of institutional provision around research integrity, they can act as important signals for internal and external stakeholders alike (e.g. a researcher wishing to raise a query or concern or a publisher wishing to liaise with an institution with regard to an investigation).

High-level considerations

Institutions consistently address misconduct cases in their annual statements A vast majority of institutional annual statements analysed provided information on misconduct allegations, investigations and outcomes (including nulls, i.e. annual statements noting that no allegations had been recorded and/or no investigations had taken place). Only one annual statement in our dataset did not comment on misconduct numbers.

In our 2023 report, we highlighted some differences in how institutions report data: for example, we noted that some considered informal reporting prior to formally logging an allegation. The reporting template is helpful in this regard, as it recommends that an initial, preliminary or screening stage of assessment should be logged by institutions as an allegation. This suggests that, as more institutions start using the template, the data is likely to become more consistent (Figure 2).

Category	2019/20	2020/21	2021/22	2022/23	2023/24
Number of annual statements reviewed	97	104	103	119	115
Statements reporting at least one misconduct allegation	60	60	65	68	61
	(62%)	(58%)	(64%)	(57%)	(53%)
Statements reporting at least one misconduct investigation	50	53	40	45	36
	(52%)	(51%)	(39%)	(38%)	(31%)
Statements reporting at least one allegation upheld in full	22	23	15	27	26
	(23%)	(22%)	(15%)	(23%)	(23%)
Statements reporting at least one allegation upheld in part	9	6	6	9	8
	(9%)	(6%)	(6%)	(8%)	(7%)

Table 1. Number of annual statements including at least one allegation, investigation or outcome

Key trends

The number of investigations in the last three years has remained stable Table 2 presents the numbers of misconduct allegations, formal investigations and their outcomes as captured by annual statements. We observe the following:

- misconduct allegations fluctuated over the period, with a general downward trend (potentially affected by the COVID-19 pandemic) from 2019/20 (283) to 2022/23 (181), before increasing again in 2023/24 (228);
- the ratio of investigations to allegations declined overall, from 65% in 2019/20 to 46% in 2023/24, which may be tied to informal resolution mechanisms as well as changes in policy (e.g. <u>UKRI policy on the</u> <u>governance of good research practice</u>); and
- 2022/23 stands out for having both the lowest number of allegations (181) but the highest ratio of investigations (77%) and 'upheld in part' outcomes (21%).

Category	2019/20	2020/21	2021/22	2022/23	2023/24
Number of misconduct allegations	283	277	197	181	228
Number of investigations (as percentage of reported allegations in the period)	183 (65%)	154 (56%)	103 (52%)	139 (77%)	105 (46%)
Number of allegations upheld in full (as percentage of investigations)	47 (26%)	86 (56%)	23 (22%)	74 (53%)	52 (50%)
Number of allegations upheld in part (as percentage of investigations)	11 (6%)	7 (5%)	8 (8%)	29 (21%)	12 (11%)

Table 2. Allegations, investigations and outcomes identified in in-scope annual statements

Allegations and investigations

A majority of institutions report between 1 and 5 allegations in each year considered Table 3 depicts the number of allegations reported by higher education institutions in 2022/23 and 2023/24. Our analysis shows that 52% of institutions in 2022/23 and 43% of institutions in 2023/24 reported between 1 and 5 allegations. This is the most common range of allegations across the sample of institutions examined.

We note that one institution alone reported 24 allegations, whereas where all others reported 13 or fewer. This outlier, however, clarifies in their annual statement that they included allegations associated with investigations that completed during the reporting year but started in a previous academic year.

Annual statements reporting	2022/23	2023/24
No information on allegations or investigations	0	1 (1%)
No allegations or investigations	47 (40%)	52 (45%)
No new allegations but some investigations pertaining to allegations from previous years	4 (3%)	1 (1%)
1 allegation	27 (23%)	20 (17%)
2-5 allegations	35 (29%)	29 (25%)
6-9 allegations	4 (3%)	8 (7%)
10+ allegations	2 (2%)	4 (4%)
Total annual statements in the year	119	115

Table 3. Number of annual statements reporting allegations or investigations

Variation by level of research activity

Levels of research activity can partly help understand allegation and investigation numbers

* The <u>Transparent</u> Approach to Costing (TRAC) is an activity-based costing system adapted to academic culture that provides information to help higher education providers understand the costs of their activities (teaching, research and other activities). No peer group is assigned to 'Stanmillis University College', a college of Queen's University of Belfast.

To further explore the findings in Table 3, we considered reporting numbers in combination with <u>TRAC peer</u> <u>groups</u>^{*} as a proxy for research activity. We observe the following:

- among the 99 statements reporting no allegations or investigations across the two years considered, 67% belong to TRAC peer groups D-F (i.e. characterised by lower levels of research activity); and
- when it comes to statements that did report allegations or investigations across the two years considered, 73% (n=134) belong to peer groups A-C (i.e. characterised by higher levels of research activity), whereas 27% belong to peer groups D-F.

This variation may be attributed to differences in staff numbers in line with higher or lower levels of research activity; to the different nature of research activities across research intensive vs small and specialist institutions; or to differences in research environments and cultures between institutions of different sizes. As the annual reporting template does not require institutions to explain the numbers provided, the information available for further assessment is scarce. In addition, given the diversity of approaches to reporting (e.g. inconsistency across annual statements in terms of reporting staff- or student-related cases) and the limited contextual information provided for individual cases reported, it is not possible to draw definitive conclusions in these regards. This suggests that future iterations of the template could productively encourage institutions to provide a brief narrative statement on the figures entered in section 3B of the template (or otherwise in customised annual statements), so as to aid the interpretation of findings.

With this in mind, we recommend that quantitative analysis of misconduct reporting is only considered as a high-level indication, rather than a definitive conclusion about individual institutions.

Misconduct types and outcomes

Plagiarism is the most common type of misconduct reported

Annual statements do not provide extended narratives around misconduct figures

Quantitative findings should be interpreted with care With a focus on years 2022/23 and 2023/24 the highest category for misconduct allegations was failure to meet legal, ethical and professional obligations (40 and 65 allegations, respectively), followed by plagiarism (53 in 2022/23 and 62 in 2023/24) and misrepresentation (17 and 32 allegations, respectively). This top three is consistent with the top three in the <u>2023 report</u> in terms of number of allegations per misconduct type, though the order of the top two causes is inverted.

Annual statements allow the reader to understand what proportion of allegations might have led to an 'upheld' outcome in an institution; however, in a vast majority of cases, there is no information on what the consequences might have been and on the gravity of each individual occurrence. We have identified two statements where significant consequences have been covered in detail:

- a statement describing the case of a student (assumed to be a research student) found to have misrepresented findings and to be involved in papermill activity, leading to the retraction of journal articles and the student's withdrawal prior to graduation; and
- a statement describing the case of a research student whose candidature was terminated with no thesis examination on the grounds of gross misconduct, due to including significant materials in their thesis without properly attributing them.

Similarly to the <u>2023 report</u>, several institutions have logged misconduct cases that originated in a given year and were completed in subsequent years, as well as cases that have started within a reporting year and not concluded by the time of writing. Cases where individuals from different institutions are involved may appear multiple times, too. Therefore, the data presented in the previous pages should only be considered as an indication.

Reflections since 2023

Comparison with the previous iteration of this report

The 2023 iteration of this report identified five key findings with a focus on higher education institutions, as reported in Table 4. The current analysis largely reconfirms all of these findings, which highlights that these may simply be long-term features of institutional provision around research integrity rather than signals of trends over time. Importantly, the continued emphasis on local adaptation highlights the need for core research integrity standards that institutions can implement in ways that are tailored to their local context. The similarity in findings with the 2023 report highlighted a significant opportunity for the 2025 iteration to focus on a greater range of case studies, which is the subject of sections 3 (deep dives) and 4 (landscape scanning). We hypothesise that the themes covered in section 4 will vary in future years, reflecting changes in the local, regional, national and global policy and technology landscapes as well as stakeholder relationships.

In addition to the findings of the 2023 report, the current iteration also presents some further reflections arising from annual statements produced within government and based on the experiences of other research organisations. These are explored in sections 5 and 6, respectively.

2023 report findings	Reflections from the 2025 analysis
#1. Annual statements describe diverse activities in different institutional contexts	Institutions continue to showcase significant adaptation of provision to their local circumstances and context.
#2. Annual statements show evidence of institutions learning from investigations	Lessons learned continue to emerge from annual statements; a vast majority of statements in our dataset include information on misconduct allegations and investigations.
#3. Research integrity is part of broader discussions around research culture	Research culture and leadership remain front and centre of annual statements, with significant recognition of their importance and impact.
#4. Support and training on research integrity are focused on early career stages	Most statements discuss forms of support and training available across levels of seniority, although coverage continues to focus on new staff and students.
#5. The effectiveness of research integrity activities is not formally monitored	The monitoring and assessment of the impact of research integrity activities remains low, but we have identified a set of illustrative examples of how this can be achieved (see Section 3).

Table 4. Comparison with the findings of the 2023 analysis (higher education institutions)

Section 3 Deep dives



About this section

Annual statements help paint a picture of key areas of research integrity provision

* Case studies included in this report were extracted from annual research integrity statements and presented verbatim as far as possible. In some cases, small adjustments were made to fit presentation and the report's narrative, though preserving the messages and tone of the original documents. For indepth review, we recommend that readers follow the links provided throughout the report and read the original materials. Annual statements provide concrete information on how institutions uphold research integrity and highlight mechanisms and lessons that can be shared for collective learning.

This section presents insights and case studies* extracted from institutional annual research integrity statements and aligned with specific requests for information in the <u>reporting template</u>. In particular, the following aspects are covered:

- Culture and leadership (section 2A of the template)
- Training (sections 2A, 2B and 3A of the template)
- Evaluating effectiveness (section 2C of the template)
- Learning from experience (section 2C and 3A, plus implied through the request for case studies in section 2D of the template).

Although this approach leverages the annual research integrity reporting template as the framework for analysis, we also acknowledge that not all institutions have made use of it. In line with this, we have ensured that some of the institutions mentioned through links and case studies include those that, to date, have not used the template. This is meant to showcase that good practices in research integrity provision are applied across the spectrum of institutions examined and not necessarily tied to the uptake of the template itself.

Regardless of the use of the template, annual statements enable the sharing of both quantitative and qualitative insights. At the same time, we report that most information available is of a qualitative nature, and that institutions are free to select what to focus on in their annual statements, making aggregation and synthesis difficult. As a result, this section focuses on narrative learning points rather than seeking to quantify trends or best practice uptake.

Culture and leadership

Key findings

Research culture is broadly recognised as an institutional priority

A range of leadership roles with research culture in their remit are emerging Evidence from numerous annual statements shows that research culture has been broadly elevated to an institutional priority across the UK higher education landscape, and its direct impact on research integrity is clearly recognised. This shift is demonstrated through financial investments, internal funding mechanisms, the creation of senior leadership positions and recognition that Equality, Diversity and Inclusion (see next page) can affect all aspects of research integrity.

As an example, universities including <u>Queen's University</u> <u>Belfast</u>, <u>Edinburgh</u> and <u>Leeds</u> have established dedicated Research Culture Action Plans with formal governance structures to oversee implementation.

The prioritisation of activities focused on research culture is further evidenced by the <u>University of Cardiff</u>'s use of a triennial research culture survey to establish longitudinal benchmarks and the <u>University of Nottingham</u>'s Research Culture Conference.

Dedicated positions at senior levels are being created to drive research culture initiatives forward, and annual statements provide significant coverage of these.

Examples include <u>Nottingham Trent University</u>'s Director of Research Culture and Environment; the <u>University of</u> <u>Bristol</u>'s Associate Pro Vice Chancellor for Research Culture; <u>Northumbria University</u>'s Dean of Research Culture; and <u>Newcastle University</u>'s Dean of Research Culture and Strategy and Associate Dean of Good Research Practice.

These leadership roles signal an emerging approach to embedding research culture into institutional structures and recognition that this area requires dedicated, seniorlevel ownership.

Culture and leadership

Key findings

Equality, Diversity and Inclusion are seen as an integral component of positive research culture Annual statements show institutional recognition of Equality, Diversity and Inclusion (EDI) as key part of positive research cultures. For example:

- <u>Leeds Arts University</u> reports their engagement with UKRIO's event on 'Decolonised research culture and practice';
- the <u>University of Manchester</u> used the European <u>Standard Operating Procedures for Research Integrity</u> <u>(SOPs4RI) Toolbox</u> to assess their policies and procedures against criteria that include the research environment, diversity and inclusion and fair, transparent and responsible policies to assess, appoint and promote researchers. This led to the implementation of policy and process changes;
- one of the five themes of <u>University College London</u>'s 10-year Research Culture Roadmap is centred around building a 'supportive and inclusive environment';
- a School at the <u>University of Edinburgh</u> established a bespoke fellowship with the Daphne Jackson Trust to support career re-integration; and
- the <u>University of Strathclyde</u> ran a Research Integrity and Culture Week aimed at promoting research integrity and a positive research culture, which included Wellcome Trust Culture Café sessions and workshops engaging a broad range of stakeholders, including those in leadership roles, supervisors and line managers, research staff and postgraduate research students. To support inclusivity and knowledge sharing, the sector-wide event was made open to external attendees both online and in person for free and a recording was made available online.

These examples illustrate how institutions are moving beyond simply adding EDI elements to existing research culture frameworks and instead are reconceptualising research culture to inherently include diversity and inclusion as fundamental aspects of research integrity and excellence.

Culture and leadership

Case studies

The <u>Royal Central School of Speech and Drama</u> discusses their engagement with research integrity in their publications: they highlight an article published by the Chair of the Research Ethics and Integrity Subcommittee (REISC) on participatory research methodologies in applied theatre practices, and an article by REISC's Secretary that engages with the ethics of AI use with LGBTQ+ communities and performers.

<u>Northumbria University</u> reports on the proactive recruitment of under-represented groups to a newly created Research Culture Committee. The Committee was established from representatives across all faculties and included reserved member spaces for traditionally underrepresented groups. The Committee has a role in monitoring the intersection between research culture activity and research integrity activity.



The <u>University of Edinburgh</u> highlights that responsibility for safeguarding the integrity of research is shared across the institution. Centrally, the University's Research Office owns the Ethics Policy and the Research Misconduct Policy, whereas the Research Governance, Compliance & Risk team is responsible for alignment with sector best practices and the expectations of the UK Concordat to Support Research Integrity.



<u>Queen's University Belfast</u>'s institutional Research Culture Action Plan launched in 2021, and the institution has been recognised as one of a number of early adopters of institutional research culture strategies in the UK R&D People and Culture Strategy. In collaboration with Ulster University, Queen's <u>has secured Wellcome funding</u> to deliver a regional research culture initiative across Northern Ireland.

Training

Key findings

Research integrity training formats vary significantly across institutions

Requirements on training attendance reflect institutional cultures and priorities Institutions offer training through a variety of routes, including online training (including in collaboration with UKRIO, e.g. <u>Queen Margaret University</u>), in-person training (e.g. <u>University of Nottingham</u>), workshops (e.g. <u>Bournemouth University</u>), mentoring (e.g. <u>Sheffield</u> <u>Hallam University</u>), seminars (e.g. <u>University of East</u> <u>London</u>) and webinars (e.g. <u>Swansea University</u>). Some institutions also referenced training delivery through an external provider (e.g. <u>Goldsmiths College</u>, <u>Loughborough</u> <u>University</u>, <u>Queen's University Belfast</u>).

Research integrity training for research students and new starters is often mandatory. Annual statements illustrate significant diversity across institutions in terms of expectations for other staff, although training materials are typically available regardless of seniority. We highlight these examples focusing on training on research integrity:

- the <u>London School of Economics</u> makes integrity training, which is based on their Ethics Code, available to all staff and students;
- the <u>University of Warwick</u> requires training to be completed by all new starters, those applying for ethical approval, those applying for internal funding and post-graduate students;
- <u>Bath Spa University</u> mandates training for academic staff and reports completion levels in their statement;
- <u>King's College London</u> offers termly training to all research-active staff, and this is monitored in terms of attendance; training does not appear to be required but is part of the new staff induction process; and
- <u>Manchester Metropolitan University</u> offers regular training sessions but also highlights specific in-person training that has been provided to Faculty Heads of Research Ethics and Governance.

This diversity likely reflects the variation in institutional cultures and accepted practices, which in turn demands an extent of adaptation regarding training provision.

Training

Key findings

Training provision is evaluated in diverse ways Based on the coverage in annual statements, institutions appear to assess their training offering and effectiveness in two main ways:

- user satisfaction measures are most common for training mechanisms or events, as highlighted by the <u>Royal Central School of Speech and Drama</u> and the <u>University of St. Andrews;</u>
- usage-based assessment is possible in cases where data is available through internal databases (e.g. online booking system, sign-up sheets) or through software adopted for training delivery. As an example, training provision via third-party software is mentioned by Aberystwyth University (2023/24), which describes how their testing of an external solution (as mentioned in their 2022/23 statement) led to a later choice to replace this with something more specific and tailored to the institution.

With a more forward-looking focus, an annual statement by <u>Newcastle University</u> describes their plan to organise a series of focus groups planned with academics, postgraduate research students and professional services colleagues to provide feedback on what they want and need from research integrity e-learning and in-person training. This effort is meant to inform internal reporting, to support the provision of future training. Similarly, the University of Reading's 2022/23 annual statement describes the development of new research integrity training and notes their particular interest in capturing feedback on how a Train-the-Trainer programme has supported the development of a sustainable model for institutional training. Importantly, their 2023/24 statement follows up on this and highlights that interest in this programme has remained high, with over 20 individuals at the University now being trained trainers engaged in research integrity.

Training

Case studies

Imperial College London describes the production of a Supervisors' Guide, which is referenced as part of the institution's <u>research integrity framework</u>. The guide sets out Imperial's requirements for the continuing professional development of supervisors and intends to support the effective development of student-supervisor partnerships, a key part of the effective development of future researchers.

<u>Wrexham University</u> mapped their training and development programme against Vitae's Researcher Development Framework. The University also discusses their investment into an external training platform focusing on research integrity, which will be available for all academic staff and Postgraduate Research Students, with specific modules being made mandatory for research students.



<u>Cardiff University</u> highlights that research integrity training has been undertaken by more than 3,000 people across staff and students (2023/24 Academic Year). Research integrity training is mandatory for all academic staff and for students undertaking MPhil, MRes or doctoral studies. Beyond this, the training is mandatory for other internal research processes, and for anyone else involved in research it is highly recommended.

<u>Glasgow School of Art'</u>s policies and training emphasise that all researchers must take personal responsibility for acting with integrity and meeting standards of good conduct. They also explicitly require supervisors, managers and leaders of researchers to ensure that those for whom they are responsible are supported and encouraged to develop the appropriate knowledge, skills and values needed for this.

Evaluating effectiveness

Key findings

Research integrity efforts are widespread, but their impact is not formally evaluated Most annual statements present an overview of institutional activities, but only a minority provide a clear indication of whether and how their effectiveness is evaluated.

We highlight the following considerations, which are in line with the findings of our 2023 analysis:

- The Concordat does not expect institutions to provide assessments of monitoring activities, although the reporting template does encourage reflections on progress and plans for future developments, including a review of progress and impact of initiatives. A range of annual statements discuss the previous year's statement or reflect on the previous year's events, showing the evolution of an institution's strategies across reporting years. This is, however, in narrative and qualitative form in the vast majority of cases.
- Some of the areas covered in annual statements, such as training uptake, do lend themselves more easily to quantitative monitoring in principle, but this is typically not pursued.

An area that is increasingly monitored is research culture. Participation in the national <u>Culture, Employment and</u> <u>Development of Academic Researchers Survey (CEDARS)</u>, which is available to Vitae member organisations, is mentioned by a range of institutions, and some provide detailed information on relevant outcomes. For example, the <u>University of Staffordshire</u> highlights that almost 76% of staff overall saying they were familiar with the institution's mechanisms for reporting misconduct, while 71% overall said they would be comfortable reporting any incident of potential misconduct. Similarly, the <u>University</u> <u>of Leeds</u> has developed Research Culture Pulse Surveys (which cover research integrity, too) to help better understand areas in most need of improvement.

Evaluating effectiveness

Case studies

As reported in our discussion of culture and leadership above, the <u>University of Strathclyde</u> runs a Research Integrity and Culture Week. This is monitored by the University, which reports that the event attracted over 350 participants (168 internal and 188 external), through both in-person and online attendance. The SharePoint site registered about 800 views, indicative of approximately 250 unique visitors.

The Week was evaluated by external evaluators who reported positive feedback, with 100% of internal respondents saying they would recommend it to a colleague. In the annual statement, the University reflects on the fact that this represents a small proportion of the target audience internally (all staff involved in research, e.g. leading, conducting or enabling research) and highlights that further consideration of how best to engage this wider audience is required.



<u>Bath Spa University</u> notes that activities led by their University Ethics Committee (UEC) are overseen via their Research Ethics Committee on a quarterly basis. Assessments revolve around three thematic areas designed to clearly communicate the University's research integrity culture to staff and students across all levels: training and development; resources, guidance and policy; and embedding ethical research practices into the curriculum and all the academic activities.

Informal mechanisms for the assessment of institutional efforts are also in place, including drop-in sessions, as well as UEC member attendance at existing core teaching staff meetings within individual schools. This has been successful in allowing integrity matters to be incorporated into curriculum design organically from the ground up as the student offer develops, as well as providing detailed opportunities to discuss process and operational matters.

Learning from experience

Key findings

A culture of continuous improvement is evident across institutions

Research Integrity Champions support learning across institutional functions The annual statements show a strong commitment among institutions to learn from experience and continuously improve their research integrity practices. The dataset of annual statements provides insights into diverse opportunities for learning:

- some institutions explicitly detail how they have learned from investigations of research misconduct, for example discussing opportunities to ensure faster outcomes (<u>Kingston University</u>) or preventative measures that could be implemented to prevent future occurrences (<u>Sheffield Hallam University</u>);
- some institutions discuss their improvements to ethics review processes by seeking and acting on feedback, for example by procuring new systems or introducing novel approaches (e.g. the introduction of a Light Touch ethics review system at the <u>University of</u> <u>Warwick</u>);
- some institutions comment on their efforts to improve the provision of integrity-focused training through feedback, which can be used to revise contents but also to adapt training methods (University of St. Andrews); and
- some institutions report using the freely available UKRIO self-assessment tool (<u>Aberystwyth University</u>, <u>Liverpool School of Tropical Medicine</u>)

Multiple institutions have implemented Research Integrity Champions or similar roles to create visible, local advocates for research integrity that can connect the academic community with professional services. As discussed in the 2023 report, the roles and remits of champions can vary across institutions, but it is recognised that faculty- or school-focused provision that is tailored to specific disciplines and local concerns can be particularly beneficial (as described, for example, by the <u>University of Southampton</u> and the <u>University of</u> <u>Nottingham</u>).

Learning from experience

Case studies

The <u>University of Essex</u> discusses their learning from misconduct cases as well as from public information made available by other institutions. Their annual statement highlights that formal investigations have helped improve the tracking of final reports, the reporting of adverse events and governance control of activities undertaken with Health Research Authority and NHS Research Ethics Committee approval.

<u>Leeds Arts University</u> developed an ethics approval questionnaire called the '<u>Ethics app</u>'. Their annual statement describes how researcher feedback has contributed to this effort, which sought to make the ethical approval process more accessible while encouraging researchers to reflect on research integrity matters applicable to a range of traditional and practicebased outputs.



<u>Manchester Metropolitan University</u> discusses their review of the Procedure for the Investigation of Allegations of Research Misconduct in line with the findings of a review delivered by external independent auditors. These changes are expected to speed up the time it takes to conduct investigations and give faculties greater powers to be able to investigate and resolve allegations swiftly.

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<u>Newcastle University</u> delivers training on research integrity via e-learning. Their annual statement highlights their request for volunteers across academic colleagues and professional services to evaluate provision alongside a pilot version of an alternative online offering. The views sought from these diverse audiences are meant to inform decision making regarding the future provision of research integrity training.

Section 4 On the radar



About this section

Annual statements reflect recent developments and emerging practices with implications on research integrity This section focuses on a set of subjects that have emerged from our thematic analysis of annual statements on research integrity produced by higher education institutions. The shortlisting of these subjects was informed by Research Consulting and this project's Advisory Group.

This section complements the structured analysis provided in the previous "Deep dives" section by exploring emerging topics that are not explicitly investigated as part of the annual reporting template. The fact that a topic has been foregrounded in this section should not be considered as a measure of its frequency in annual statements: the discussions and case studies presented are potential cross-sector learning opportunities that the project team identified as particularly impactful in light of broader sector developments and trends.

The following subjects are covered in the remainder of this section, with a focus on their intersections with research integrity:

- Open scholarship
- Research data
- Professional services
- Networks and partnerships
- Research security
- Artificial intelligence

The topics covered in this section include both technological developments and organisational innovations that are reshaping how universities approach integrity across their research ecosystems. By highlighting these forward-looking areas, we aim to capture the evolving nature of research integrity provision and discuss potential areas where future training, advocacy efforts or template revisions might be beneficial.

Open scholarship

Key findings

Institutions are establishing structures that link research culture, research integrity and open scholarship

Incentives and awards are used to promote open scholarship Several universities are creating formal and informal structures that link research culture, research integrity and open scholarship, showing positive progress and the convergence of conversations that were previously tackled independently. For example, Leeds Beckett <u>University</u> discusses the appointment of a new Research Integrity & Ethics manager along with the creation of a Research Culture and Environment team, aiming to ensure that appropriate professional support and resources are available for research integrity and researcher development. Similarly, King's College London has a dedicated Open Research Project Coordinator within the Research Integrity Office who works on the UK Reproducibility Network's Open Research Programme. These developments and their profile will naturally vary with the type and focus of an institution. However, they do reflect the sector's growing recognition that open scholarship practices enhance research transparency and reliability and are an important aspect of the UK Concordat to Support Research Integrity.

Institutions are employing various strategies to incentivise open sharing practices that help make research more accessible, reproducible or transparent. Examples of these mechanisms include Open Research Awards (<u>Newcastle University</u>), Open Science and Scholarship Awards (<u>University College London</u>) and the 'Unleash your Data and Software' prize (<u>University of</u> <u>Sheffield</u>).

These efforts serve not only to recognise and celebrate individual achievements, but also as powerful cultural signals that help normalise open scholarship practices across the academic community, with a direct impact on transparency and research integrity.

Open scholarship

Key findings

Institutions are supporting diverse types of research outputs and open scholarship practices

* Please see the dedicated pages focusing on networks and partnerships for a broader discussion on this subject. Annual statements show growing support of a range of open research outputs beyond traditional publications. These developments show that institutions are expanding beyond the traditional focus on open access journal articles to include a wider ecosystem of research outputs throughout the research lifecycle - from study protocols and preregistrations at the beginning of projects, to sharing code, data and preprints during and after research completion. This expanded focus reflects a more holistic understanding of the research process and of practices that help uphold high levels of research integrity, where transparency and openness are valued at every stage.

A broad range of examples are discussed across annual statements, including:

- recognising diverse research outputs across disciplines through improved technological infrastructure (e.g. ensuring that institutional repositories can accommodate practice outputs, as highlighted by the <u>University of Westminster</u>);
- engaging with collaborative initiatives focused on reproducibility and transparency (e.g. the <u>University of</u> <u>Glasgow</u>'s leadership of a strand of work on data access statements, as part of the UK Reproducibility Network);
- leveraging networks* and forums to promote open research practices across disciplines (e.g. adopting ReproducibiliTea journal clubs at the <u>University of</u> <u>Leeds</u>, aiming to "promote, facilitate and deepen the conversation about open research across all fields of study"); and
- creating tailored guidance and examples for different academic fields (e.g. releasing resources for "Open Research across disciplines", as done by the <u>University</u> <u>of Surrey</u>).
Open scholarship

Case studies

Nottingham Trent University highlighted several developments regarding open research. These included the renaming of the University Research Integrity Committee to the University Open Research and Integrity Committee, alongside the development and endorsement of an Open Research Strategic Plan, showing the institution's acknowledgement that the open research agenda is complementary to research integrity.

The <u>University of Kent</u> shared their new Open Research statement and an agreed action plan. Their annual statement discusses efforts by the Open Research Team to coordinate work through a project titled 'Promote an Open Research Culture at Kent', as well as discussing the University's new draft policies on research data and publications and their new Open Research webpages. Their institutional repository now also supports preprints.



<u>Keele University</u> discussed their Open Access Policy and the introduction of a rights retention element. This supports researchers to disseminate research whilst retaining rights, rather than transferring these to publishers during the submission and publication process. This also supports compliance with funder and research assessment requirements around open access and immediately after acceptance.

The <u>University of Manchester</u> provided details of their 'Open Research Fellowship Programme' - an initiative delivered by the Office for Open Research and providing an opportunity for staff to contribute to developing diverse elements of open research. In the programme, successful Fellows receive funding for one day a week for up to a year to focus on projects that aim to define, investigate, or facilitate open research practices in their subject area or institutionally.

Research data

Key findings

Research data management is increasingly integrated with other institutional provision

The FAIR data principles are being adopted by institutions There is growing recognition that research data management is a key contributor to the open and transparent sharing of information arising from research. This is leading institutions to more deeply connect research data management practices with other aspects of institutional provision, for example multiple institutions report:

- increasing integration between research ethics and data management processes, and data management plans are often required as part of ethics applications;
- investing in digital infrastructure, including data repositories and improved data storage for active research (including large volumes, e.g. the deployment of the Research File Service at the <u>University of Oxford</u>);
- delivering training on various aspects of research data management, from data management planning to data sharing; and
- improving provision to access, process and work with sensitive or confidential data.

These efforts are often described as being crossfunctional (particularly in research intensive institutions), with involvement from teams across IT services, information security, research services and libraries.

The FAIR principles are guidelines to improve the Findability, Accessibility, Interoperability, and Reuse of digital assets. They are mentioned by a spread of institutions of different sizes and across regions, showing that awareness is rising. Examples of annual reports covering the FAIR principles include those produced by the universities of <u>Sheffield</u> and <u>Westminster</u>, as well as <u>Queen's University Belfast</u>. Progress is often being made through the efforts of working groups that consider how these broad principles can be applied in the local context.

Research data

Case studies

The <u>University of Sunderland</u> discusses a range of templates available for ethical review. In this context, it notes that a form ensures that users specify the handling of research data, including Data Management Planning and GDPR considerations. Furthermore, the University highlights their engagement with broader open research practices, aligned with the Concordat on Open Research Data.

Edinburgh Napier University describes amendments undertaken to their research data management system, to integrate data management planning as part of an existing module focusing on research ethics. The upgrade was undertaken to remove duplication between processes and enable the connection of data management planning to wider information on research projects.



<u>Wrexham University</u> reports on the establishment of a new Research Information Governance Task & Finish Group. The group reports to the Information Governance Committee and Research Committee and has been asked to review or implement a number of important policies and solutions, including, among others, research data management, shared data storage, data repository solutions and security-sensitive research data.

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<u>City, University of London</u> (as was) discusses the delivery of research ethics training across the University by Schools and Departments, and centrally through the Doctoral College. One of these sessions includes a joint session to cover both research ethics and data management planning to highlight the overlaps between these. The statement also discusses efforts to enable access to secure research data for students and staff.

Professional services

Key findings

Diverse professional services structures support research integrity

Professional services play a key role in training and development Research integrity provision takes vastly different shapes based on an institution's context, size and disciplinary focus. As a result, although a locus of responsibility for research integrity is discussed in all annual statements, practical implementation varies significantly. For example, research integrity may be within the remit of a single lead within a specialist institution (e.g. <u>University of the Arts London</u>) or served by a larger team in a research intensive one (e.g. <u>King's College London</u>). Many annual statements explicitly also refer to a range of parallel teams with overlapping responsibilities and the impact that these have on integrity-focused provision; examples include open research teams, research governance and compliance teams or discipline-specific professional services staff.

Furthermore, professional services are increasingly recognised as participants in research delivery. This is especially visible with regard to technicians, as the Technician Commitment is being increasingly adopted and reported on in annual statements (e.g. <u>Queen's</u> <u>University Belfast</u>, <u>University of Edinburgh</u>)

Several institutions report on how professional services teams have spearheaded events that support and build a culture of research integrity. This can include a range of mechanisms, such as the Research Integrity and Culture Week held by the <u>University of Strathclyde</u> or the <u>Oxford Festival of Open Scholarship (OxFOS)</u> ran by the University of Oxford. These events allow professional services staff not only to share information but to learn from researchers about their needs and challenges, creating a virtuous cycle of improvement. These potential benefits are outlined by the <u>University of Glasgow</u> alongside the importance of a complementary network of Integrity Champions and Advisers at the local level.

Professional services

Case studies

The <u>University of East London</u> highlighted the role of dedicated professional services staff members working within the Office for Postgraduates, Research and Engagement. They described the Office as sustaining 'a cohesive research approach' covering a range of interconnected areas such as integrity, ethics, research impact, funding, public engagement, community involvement and postgraduate endeavours.

The <u>University of Birmingham</u> reported on a collaboration between academic and professional services staff to improve the pathway for clinical research projects, in response to feedback that this was complex and challenging to navigate. As a result of the collaboration, the Clinical e-pathway was developed: this provides a roadmap that guides researchers through each stage of their clinical research projects.



The <u>University of Aberdeen</u> highlighted the development and upcoming implementation of a new hub, PORTAL, to support research training and career development. PORTAL is expected to bring together teams from across Professional Services who are involved in supporting the research process, aiming to prevent overlaps and enabling any gaps in provision to be highlighted, as well as promoting cross-team working.



As part of activities to promote research integrity, <u>Swansea University</u> comments on research culture. In this context, they report on the growth of the Technician Commitment. The annual statement describes efforts by the University's Technician Commitment working group, including plans such as the Annual Technician Symposium, which aims to recognise, value, develop and support the technical community at Swansea.

Networks and partnerships

Key findings

Institutions rely significantly on networks and membership bodies to learn about and improve research integrity provision

* ARMA, COPE and UKRIO release information and resources in the public domain (e.g. reports, guidance, advice). We do, however, recognise that ARMA and COPE are membership bodies (the former for individuals and the latter for organisations) and that UKRIO offers an organisational subscription covering additional resources and support. Due to these costs, formal participation may not be viable for all institutions.

Institutions participate in a broad range of national and international networks and membership bodies focused on research integrity. These enable knowledge and resource sharing, training and development, awareness of best practices and potential efficiency gains.

Among the networks and membership bodies mentioned across annual statements, we highlight the Association for Research Managers and Administrators (ARMA), the Committee on Publication Ethics (COPE), the Russell Group Research Integrity Forum, the Scottish Research Integrity Network (SRIN), the UK Reproducibility Network (UKRN), and the UK Research Integrity Office (UKRIO).*

Another interesting example is the 2020 formation of the London Research Integrity Consortium (LRIC) by King's College London and City, University of London (as was; first mentioned in <u>King's College London 2019/20 annual</u> <u>statement</u>), which aims to support institutions with limited capacity to deliver research integrity provision. The initiative is reflected in the latest statements by <u>King's</u> <u>College London</u>, the <u>Courtauld Institute of Art</u> (see case study) and the <u>University of the Arts London</u>.

Importantly, grassroots-led efforts driven by academics complement this picture. An example of this is ReproducibiliTea, a journal club initiative that helps researchers create local Open Science journal clubs at their universities. This is mentioned in the annual statements by the universities of <u>Southampton</u>, <u>Newcastle</u> and <u>Leeds</u>, with the latter highlighting that the focus is inter-disciplinary and that meetings are open to people at all career stages, including support staff, professional and managerial staff. We note the ReproducibiliTea's own website showcases <u>broader</u> <u>adoption</u> across UK institutions, suggesting that inclusion in annual statements is likely to be partial.

Networks and partnerships

Case studies

The <u>University of Wolverhampton</u>'s research strategy identifies the development of a research culture that promotes rigour, integrity and responsible research among their three strategic priorities. In this context, they joined the UK Reproducibility Network and became signatories to the Declaration on Research Assessment DORA, to contribute to best practice on research culture and research integrity.

Robert Gordon University engages with external networks including the Scottish Research Integrity Network (SRIN), the UK Research Integrity Office (UKRIO) and the Association of Research Managers and Administrators (ARMA), which has helped shape policy and guidance to support researchers. Internally, several sharing networks are available, including through the Research Integrity and Ethics Sub-Committee.



The <u>Liverpool School of Tropical Medicine</u> has strengthened links between research integrity-related Committees, working groups and initiatives. They highlight the role of their network of Research Integrity Champions, including staff based across departments at LSTM and representatives of their key African partner organisations (Malawi Liverpool Welcome, Malawi) and (Centre for Research in Infectious Diseases, Cameroon).

The <u>University of Warwick</u> supports the implementation of the principles of research integrity, including honesty, rigour and transparency through their work on Open Research. It has signed up to the Coalition for Advancing Research Assessment (CoARA) to support the responsible and transparent use of metrics and in recognition of the diverse outputs, practices and activities that maximise the quality and impact of research.

Research security

Key findings

Governance structures are evolving to address emerging research security concerns

Dedicated professional services, policies and training underpin implementation efforts Annual statements show that many institutions are addressing the subject of research security. For example, the University of Huddersfield discusses their efforts to develop a strategy to embed trusted research into existing processes around research governance, ethics and integrity, in combination with a new training package. Other institutions are investing in dedicated governance structures to manage research security: University College London created a Research and Innovation Security Committee to maintain strategic oversight of research and innovation security with a focus on international collaborations and partnerships, whereas the University of Nottingham decided to place Trusted Research directly on their University Risk Register with briefings delivered to their University Executive Board, Council and Senate. In this context, the Higher Education Export Control Association (HEECA) and the Research Collaboration Advice Team (RCAT) have emerged as important resources to strengthen institutional capabilities.

Universities are investing in dedicated professional expertise and developing policies and training to mitigate research security risks. For example, the <u>University of</u> <u>Bath</u> established a Research Governance and Compliance Team comprising 5.6 full-time equivalent staff, including a dedicated Trusted Research Manager and a Research Integrity Manager. On the policy side, The <u>University of</u> <u>Wales Trinity St David</u> introduced a Trusted Research & Innovation Policy and Export Control Policy; the <u>Open</u> <u>University</u> discussed updates to their Code of Practice with regard to trusted research; and the <u>University of</u> <u>West Scotland</u> launched a trusted research campaign as well as a training seminar and individual meetings with research groups following guidance from the UK's Centre for the Protection of National Infrastructure.

Research security

Case studies

<u>The University of Exeter</u> reported on the appointment of a Partnership and International Research Compliance Manager. The role provides leadership and oversight to processes covering a variety of elements of international research security. A programme of training and engagement for academic and professional services has been delivered alongside development of a detailed Trusted Research Framework (including a risk heatmap and gap analysis) since starting in the post. The University highlights close working with the <u>Research Collaboration</u> <u>and Advice Team (RCAT)</u> to understand the international research landscape.

<u>Queens University Belfast</u> reported a strong focus on awareness raising of international research security through a variety of activities. These included Town Halls, School based forums, invited guest lectures and the piloting of the Higher Education Export Control Association (HEECA) Export Control training. In a subsequent year, the Royal Irish Academy hosted a public panel meeting in the School of Chemistry and Chemical Engineering on 'What is Ethical Research' which included a lens on trusted research.

<u>Queen Margaret University</u> highlights their investment in a Research and Knowledge Exchange Fellow opportunity to champion developments around sector Concordats. This includes work on safeguarding in research, trusted research, research integrity and capturing the career destinations of researchers. Two staff members have been seconded into the role so far, contributing additional efforts around research culture and environment.

Artificial intelligence

Key findings

Dedicated working groups tackle AI ethics and accountability

Universities share knowledge and collaborate to develop AI use best practices The evidence shows universities establishing dedicated working groups to address the implications of AI on research ethics and research integrity. These groups are tackling complex questions about privacy, accountability and responsible use of AI technologies. This includes the acceptable use of generative AI by staff and students in all aspects of research and scholarly communications.

Several institutions are developing policy frameworks rather than simply reacting to emerging technologies, sometimes based on surveys of researchers and/or professional services that explore current Al use, perceived risks and benefits.

There is evidence of cross-university collaboration regarding the AI use best practices. The <u>University of East</u> <u>Anglia</u> describes contributing to the UKRIO Roundtables on 'AI and Research Integrity' and participating in a Trusted Research Working Group Meeting on 'Looking at AI and Ethical Review.' Similarly, a statement by the <u>University of Birmingham</u> details how the Russell Group Research Integrity Forum hosted a meeting covered good research conduct expectations, with specific discussion on frameworks for AI use in research.

Universities are also creating communities of practice around AI use. For example, <u>Newcastle University</u> established 'AI in Research and Education communities of practice' channels online to encourage knowledge sharing, while the <u>University of Nottingham</u> created a new research group called 'Responsible Digital Futures' focusing on responsible innovation, ethics of generative AI or social implications of emerging digital technologies

Artificial intelligence

Key findings

Al use is increasingly integrated into research ethics frameworks

Early reflections on Al use are yielding positive results Some universities are embedding AI considerations into their existing research ethics frameworks. Several institutions reported adding specific questions about AI to their ethics review forms.

For instance, to stimulate critical engagement with this subject, the <u>Royal Central School of Speech and Drama</u> has integrated AI considerations into their ethics review process by adding a specific question to their ethics review forms. Similarly, the <u>University of Edinburgh</u> describes a new set of questions encouraging those who work on online research as well as large language models to reflect on ethical implications rather than only following best practice standards.

Universities are adapting quickly to emerging challenges, using early experiences to refine policies and create practical resources for their research communities. Reflections on the risks and opportunities brought by Al are beginning to show tangible outcomes.

For example, the University of Greenwich demonstrates how direct experience can inform policy development: after identifying generative AI use in a postgraduate research student's thesis during a misconduct investigation, they introduced a structured training programme called 'Generative AI and the Researcher: Strategies, Insights and Practical Uses'. Similarly, the University of Oxford's Research and Innovation Committee has taken practical steps after discussing AI's impact in conducting, analysing and reporting research: for example, they implemented revisions to their guidance on authorship and publication in response to developments in large language models. Furthermore, York St John University highlights their public response to the presence of AI in the research landscape and the integration of AI considerations into their continuing professional development programmes.

Artificial intelligence

Case studies

The <u>University of East London</u> hosted a LinkedIn Live session on 'How we can use AI for the greater good?'. The event drew on UEL's AI experts across a range of subjects and debated topics including the environmental costs of AI and the relationship between AI and current sociopolitical systems. The session additionally covered the greater philosophical and ethical considerations on the use of AI.

<u>Anglia Ruskin University</u> reported on steps towards addressing the implications on AI use, including the Deputy Dean (Research and Innovation) running a session on AI and convening a working group to further explore this growing area. Topics that the working group seeks to address include privacy issues with AI and the implications for ethics and healthcare, such as who would be accountable for decisions.



The <u>University of Strathclyde</u> described their Research Integrity and Culture Week, during which they ran a sector-wide event on 'Research Integrity in the Age of Al'. This was followed by a session to support deliberation and discussion on ways in which organisations can best support research integrity in the use of Al. This was delivered as an interactive 'Al Integrity in Practice' fishbowl session.

<u>Newcastle University</u> reported on the establishment of a new AI in Research Working Group in September 2024. The aims of the group are to develop university guidance and principles on the use of Generative Artificial Intelligence in facilitating research, to share case studies on the use of AI in research at Newcastle University and ensure good research practice within this rapidly evolving landscape.

Section 5

Insights from annual statements produced within government

High-level considerations

Understanding the implementation of the UK Concordat to Support Research Integrity within government As highlighted in <u>guidance by the Government Office for</u> <u>Science</u>, those working in government must comply with <u>The Seven Principles of Public Life</u> (known as "the Nolan Principles"), which set out ethical and integrity standards. The UK Concordat to Support Research Integrity is seen as an interpretation of these principles within a research context.

On the recommendation of the Government Chief Scientific Adviser (GCSA), departmental Chief Scientific Advisers (CSAs) have signed up to the principles of the Concordat for the forms of scientific research undertaken within and for their departments. Similarly, on the recommendation of the National Statistician, Departmental Directors of Analysis (DDANs) and Analysis Function (AF) Heads of Profession have signed up to the principles of the Concordat for the forms of research conducted by their professions. CSAs, DDANs and AF Heads of Profession have a role in holding their department and its sponsored bodies to account for implementing the Concordat and should provide advice on it.

As part of our analysis, we searched for and identified a total of 21 annual statements <u>produced within</u> <u>government</u>. It is especially important to highlight that these statements are all available via a single webpage on the UK Government's website, managed by the Government Office for Science. This makes their identification significantly easier compared to higher education institutions and other types of research performing organisations. The range of annual statements identified does not cover all departments of the UK Government. At the same time, the abovementioned <u>webpage</u> does include contact points for a broader range of departments, including several that have not published an annual statement.

Distinguishing features of government reporting

Annual statements produced within government are more streamlined and follow a customised template Within government, a <u>reporting template</u> (not mandatory and different from the one for higher education institutions) is available and broadly used across the annual statements we examined. Annual statements making use of this template are consistently concise and outcome-focused, emphasising specific actions and results rather than providing extensive narratives.

We highlight an extent of variation in terms of framing and contents across statements produced within government. For example:

- the <u>Department for Energy Security & Net Zero</u> (<u>DESNZ</u>), as a newly formed department, discusses the establishment of their integrity framework;
- the <u>Department for Transport (DfT)</u> describes a developed approach that includes management assurance exercises to monitor compliance with standards; and
- the <u>Food Standards Agency (FSA)</u>, as an independent department, emphasises their science-driven mission through integrity processes that align with their public health mandate.

These natural differences across departments clearly show that flexibility is key when supporting research integrity, as organisational features and culture must be considered when devising strategies to support researchers within the organisation and external contractors alike. This perspective also highlights that some insights gained from the analysis of statements produced within government are likely to be applicable to any organisation navigating the balance between consistent alignment to Concordat principles and contextual implementation.

Tailoring to local context

Case studies

The <u>Cabinet Office</u> has identified the need to introduce new internal guidance and processes in relation to research transparency, ethical research and supporting quality research. For example, their annual statements includes plans for implementing processes to support regular clearance for publication of research plans before research commences and of publishing research findings promptly on completion.



The <u>Met Office</u> discusses how research integrity commitments are advanced through their corporate values, policies and procedures. For example, they highlight that their core value of being a 'Force for Good' is reflected in ethical standards and their promotion of socially and environmentally responsible activities. Like the GOS (see above), they acknowledge the importance integrity as part of the GSEP Career Framework.



The <u>National Police Chiefs' Council's (NPCC)</u> annual statement highlights their commitment to open science, supporting police forces in their efforts to make research findings and underpinning data freely available online in an accessible format. The NPCC pursues five science pillars through a formal programme of work: open access, open data, open materials, pre-registration, and citizen science.

Section 6

Insights from other research organisations

High-level considerations

Context	As noted in Section 1, we sought to identify annual statements produced by research organisations other than higher education institutions. These include a diverse ecosystem of bodies spanning public sector research establishments, charitable organisations, cultural institutions and more.
	Similarly to the <u>2023 report</u> , we were able to find a limited number of documents produced by these bodies: we collected and analysed 9 documents for 2022/23 and 10 for 2023/24, published by 13 unique organisations.
	With a small sample size and high diversity in missions, structures and operational contexts, meaningful comparative analysis is challenging (as is the case in section 5 above). As a result, the discussion in this section should be considered as a high-level overview, intended to highlight broad commonalities and differences across the range of organisations we examined.
Annual statements provide key information and contact points for leadership and queries	 We highlight the following features of annual statements produced by research organisations beyond higher education institutions: the length of these annual statements varies among these organisations, typically between 2-6 pages, which is similar to statements produced within government; the vast majority of these annual statements directly mention the UK Concordat to Support Research Integrity; and statements include key contact information, with a named senior member of staff with oversight of research integrity (e.g. Director of Research at the Francis Crick Institute; Head of the Research Integrity Service at the <u>CRUK Scotland Institute</u>; or Director of Science at the James Hutton Institute) as well as a

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member of staff who will act as a first point of contact.

Coverage of research integrity topics

The coverage of research integrity topics is similar to statements by higher education institutions Although the statements examined in this section are more concise compared to those produced by higher education institutions, the subjects covered are similar. This likely arises from the fact that these organisations are mostly research-focused, so their thinking around research integrity is likely to share some commonality with higher education institutions. The following topics are often covered in the annual statements we analysed:

- policies and procedures: statements often include specific policies on good research practice, research misconduct, data management, ethics (for both human and animal research) and whistleblowing (e.g. <u>Alan Turing Institute</u>). Several statements indicate that integrity-related policies and procedures are subject to regular review and updates to ensure they align with best practices, regulatory requirements and the evolving research landscape (e.g. review of the Code of Practice for Research and the Use of Animals in Research Policy at the <u>Institute of Zoology</u>);
- training: most organisations detail their efforts in providing training and development related to research integrity, for example via inductions for new staff and students, workshops, seminars and team-led discussions (e.g. <u>CRUK Scotland Institute</u>);
- reporting mechanisms: the statements consistently outline how individuals can raise concerns or allegations of research misconduct, such as via named contacts or dedicated email inboxes. For example, the <u>Francis Crick Institute</u> additionally launched a "Speak Up" service for anonymous reporting;
- emphasis on a positive research culture: several statements underscore the impact of a positive research culture on high levels of research integrity (e.g. appointment of four research leaders as Research Integrity Champions at the <u>Institute of Cancer Research</u>).

Section 7 Final remarks

Final remarks

This analysis of annual statements on research integrity reveals a maturing landscape with continued improvement across the UK research ecosystem. Our review highlights several key developments in interconnected areas:

Integrating research integrity into institutional culture	 Research integrity is increasingly embedded within broader institutional priorities rather than treated as a standalone area for compliance. This is evidenced by: The creation of senior leadership positions focused on research culture and integrity Integration of research integrity within strategic objectives Recognition of research integrity's contribution to research excellence Collaborative approaches involving diverse stakeholders
Strengthening the role of professional services	 Professional services are playing an increasingly vital role in fostering research integrity. This is evidenced by: Cross-functional teams providing specialised expertise Dedicated events and training programmes building awareness and skills Recognition of technical staff contributions through initiatives like the Technician Commitment Communities of practice facilitating knowledge sharing across disciplinary boundaries
Responding to an evolving landscape	 Institutions are developing proactive approaches to address a rapidly evolving landscape. This is evidenced by: Governance frameworks and risk management for international research security Ethical frameworks and working groups addressing Al applications in research Tailored policies reflecting diverse institutional contexts and needs

By building on the solid foundation evident in these annual statements, UK institutions can continue to demonstrate leadership in research integrity while adapting to a rapidly evolving research landscape. As challenges such as generative AI and research security further develop, institutions will likely benefit from the collaborative networks and communities of practice that have already demonstrated value in sharing knowledge and approaches. The future of research integrity in the UK thus rests not only on alignment with established frameworks and requirements, but on the sector's collective capacity to innovate, collaborate and embed integrity as the cornerstone of research excellence in an increasingly complex external landscape.

Thank you

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