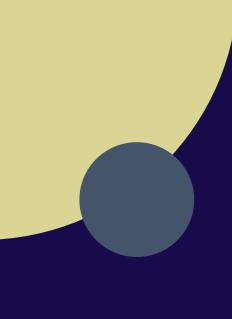


### Review of annual statements on research integrity

An overview of research integrity activity and good practice at higher education institutions in the United Kingdom

The UK Committee for Research Integrity and the Research Integrity Concordat Signatories Group



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### **FOREWORD**

The <u>UK Committee on Research Integrity</u> is dedicated to promoting integrity in research across all disciplines and to supporting good governance of research practice. Through partnership with diverse organisations, including higher education institutions, research institutes, and public, private and third sector agencies, the Committee works to promote and strengthen research integrity throughout the UK, and in the UK's international research partnerships.

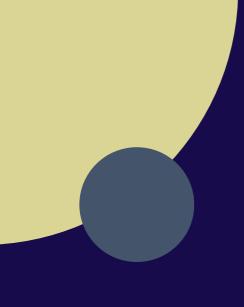
The Committee produces an <u>annual statement</u> on the state of research integrity in the UK. To inform this, and building on <u>previous work</u> in this area, the Committee and the Research Integrity Concordat Signatories Group <u>commissioned the present report</u>. Here, Research Consulting present a body of evidence focusing on research integrity in UK higher education institutions and discuss their key findings from an assessment of over 280 annual statements.

The statements underpinning this report have been published by institutions in response to the expectations of the <u>Concordat to Support Research Integrity</u>, most recently updated in 2019. While annual research integrity statements were not originally intended for collective analysis, they serve as a valuable source of information on institutional efforts over time. The findings of this work will inform the Committee's ongoing efforts to promote research integrity and good practice in the UK higher education system, as well as the upcoming review of the Concordat by the Research Integrity Concordat Signatories Group.

Professor Andrew George MBE and Professor Rachael Gooberman-Hill
Co-chairs of the UK Committee on Research Integrity







There is clear evidence that higher education institutions consider research integrity to be a strategic priority and have been ramping up efforts in this area. Our assessment of annual statements indicates that activities to support research integrity are highly variable in scope and format, based on the institutional context and resources available.

### Annual statements describe diverse activities in different institutional contexts

Annual statements discuss a broad range of activities in support of encouraging good practice in research and its governance. There is significant natural variation in how these are reported, reflecting institutional contexts.

### #2 Annual statements show evidence of institutions learning from investigations

The number of misconduct allegations, investigations and outcomes is reported in almost all annual statements (98%). In several cases, institutions share lessons learned and actions implemented following misconduct investigations.

### Research integrity is part of broader discussions around research culture

Annual statements include examples of activities that align with research integrity principles but are often grouped under the banner of research culture. Policies and procedures related with research integrity are often mentioned in annual statements.

### Support and training on research integrity are focused on early career stages

A significant majority of statements (at least 87% for each year considered) report on providing training on research integrity, typically for postgraduate or early career researchers. Training for later career stages is available, but often not mandatory.

### The effectiveness of research integrity activities is not formally monitored

Annual statements describe a wealth of valuable activities to support research integrity. These are described in a narrative way, and annual statements do not typically discuss their effectiveness or uptake.

### **METHODOLOGY**



This work comprised three key steps:

- We undertook targeted searches for annual research integrity statements (henceforth referred to as "annual statements") produced between academic years 2019/2020 and 2021/2022, which led to the identification of 264 documents. An additional 19 annual statements were obtained via direct engagement with institutions.
- We analysed annual statements via <u>NVivo</u>, to tag relevant portions of text that mapped to areas in the <u>reporting template</u> recently <u>developed by UKRIO</u> and piloted by the Research Integrity Concordat Signatories Group as well as to identify potential case studies. Binary information on whether each area considered was covered was also collected separately, in tabular form. Detailed information on this is available in Annexes A and B, which include our <u>analysis</u> <u>framework</u> and <u>full dataset</u> with the exception of misconduct figures to avoid identification. This first layer of analysis was complemented by detailed thematic coding.
- All findings were visualised via <u>Power BI</u> to allow for analysis and synthesis, and led to the
  development of this report. Due to the complexity of the subject matter and the limited
  consistency in the documents examined, all work was delivered by human analysts as opposed
  to automated means.

It should be noted that this report reflects Research Consulting's findings and assessment.

### Scope of work

Our analysis considered annual statements prepared by the 134 UK higher education institutions that have received UK Research and Innovation (UKRI) funding between financial years 2019/2020 and 2021/2022. This set of higher education institutions was chosen as alignment with Concordat requirements is expected in UKRI grant terms and conditions. Throughout this report, and in the supporting data released via Zenodo, we do not name these institutions, except for cases where they are used as part of a good practice case study. This is to avoid the metricisation of our findings, which are meant to paint a picture of research integrity across the UK and not as a means for ranking or comparison. Independent research organisations were also considered as part of this project, and a total of 25 were identified in line with the same funding criteria. Annual integrity statements were only found for four of these organisations, including upon directly contacting them, which led to the decision to exclude them from our analysis. Lessons learned while searching for statements by independent research organisations were shared with the Committee and Concordat signatories, to inform practice in future reporting years.

### **LIMITATIONS**

The main limitation of this report is the high reliance on analytical judgement and interpretation, which arises from the thematic coding approach adopted. This was unavoidable due to the features and variability of the annual statements being analysed and was mitigated by testing our analysis framework prior to beginning the work as well as by performing quality assurance on random items. The fact that annual statements differed from one another in multiple ways (e.g. length, style, level of detail, audience) further complicated matters, although this was expected, as we sought to analyse institutions of completely different nature.

The above limitations led to a decision to focus on narrative discussion rather than 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 have analysed and provide illustrative examples of the high-level points made throughout the document. Case studies have been chosen to reflect examples from all UK countries as well as from all peer groups based on the Transparent Approach to Costing (TRAC) process (here used as a proxy to describe institutional size).

### **ACKNOWLEDGEMENTS**

This work was supported by an engaged working group, including Claire Henderson and Gillian Rendle (UK Committee on Research Integrity). A Project Board provided expert review and quality assurance and included the following individuals:

- Hazel McGraw (Senior Policy Analysis Officer Scottish Funding Council)†
- James Parry (Chief Executive UK Research Integrity Office, UKRIO)†
- Louise Dunlop (Head of Research Governance, Ethics and Integrity Queen's University Belfast)\*
- Miles Padgett (Royal Society Research Professor and Kelvin Chair of Natural Philosophy University of Glasgow)\*
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- Rebecca Veitch (Head of Research Integrity UK Research and Innovation)†

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.

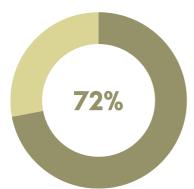
### ANNUAL STATEMENTS

Our research covered a sample of 283 annual statements by 117 institutions, or 70% of the target population of 402 (three reports for each institution). Annual statements ran the gamut from one-page declarations of compliance with the Concordat to 20-plus-page discussions of activities related to research integrity at the institution within the reporting period. 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. In some cases, annual statements referred to calendar years rather than academic years. Where this happened (n=19), annual statements were assigned to the closest match of academic year (e.g. calendar year 2019 was considered as part of academic year 2019/2020); this is not expected to significantly affect or skew our findings, as it was not a widespread phenomenon. During the data discovery phase of our work, we were not able to access any annual statements from 17 in-scope institutions (15%): these statements could not be readily identified online and were not provided upon request. As we do not have evidence as to whether these statements have been written, we were not able to draw conclusions around alignment with Concordat expectations (i.e. the statements may exist but have not been shared online or with us).



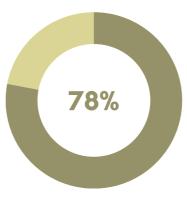
70%

of institutional annual statements within our scope of work were available to analyse, across all academic years considered. Of these, 19 annual statements (5% of in-scope statements) were not discoverable online but were obtained by contacting institutions via email. It is too soon to interpret figures for 2021/2022 as a decreasing trend: eight institutions let us know that they had not yet published their latest annual statement.



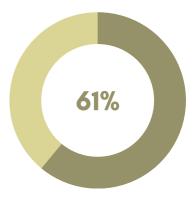
of annual statements by inscope institutions available for 2019/2020

92 annual statements discoverable online and 5 obtained via email



of annual statements by inscope institutions available for 2020/2021

96 annual statements discoverable online and 8 obtained via email



of annual statements by inscope institutions available for 2021/2022

76 annual statements discoverable online, 6 obtained via email

### CHALLENGES IN ASSESSING ALIGNMENT WITH CONCORDAT PRINCIPLES

The Concordat's five principles of honesty, rigour, transparency and open communication, care and respect, and accountability are evident in institutions' reporting and narration of their efforts towards research integrity. The five principles are most often invoked to assert compliance rather than to explain how they are successfully embedded in an institution's research practice and culture. As part of this work, we attempted to understand the extent to which annual statements cover these principles, but this proved highly subjective. Although the principles do appear in over 60% (n=170) of annual statements, which can be confirmed via text queries, the high-level wording used means that third parties are, in most cases, not able to clearly map provision to the principles. In a small number of cases, institutions do describe and reflect on the activities in place to support the five principles, but this is not done consistently across the annual statements we reviewed.

It is useful to acknowledge that the five principles are formulated in a somewhat abstract way, which is necessary due to the nuances of the subject matter. This observation provides a possible reason why institutions appear more likely to provide detail and reflection on activities around transparency and open communications or misconduct procedures, and less so when it comes to more abstract principles such as honesty or rigour. This may arise from the higher tangibility of some areas for intervention, and the fact that these may be easier to report on in practice (e.g. specific policy provision, extent of open sharing, outcomes of the misconduct procedure).

As things stand, only a small number of the annual statements make use of templates. Where this happens, institutions appear to report more consistently, especially with regard to basic details such as name and contact of named persons, date of governing board approval or reporting period. We expect that the piloting of a template for annual statements, introduced by the Research Integrity Concordat Signatories Group in November 2022, will help to enable some consistency whilst retaining institutional flexibility in what activities and lessons they choose to report.

#1
ANNUAL STATEMENTS
DESCRIBE DIVERSE
ACTIVITIES IN
DIFFERENT
INSTITUTIONAL
CONTEXTS

### ANNUAL STATEMENTS REFLECT EACH INSTITUTION'S RESEARCH INTEGRITY JOURNEY

The annual statements produced by higher education institutions report a significant range and depth of activities, across a breadth of relevant topics, in support of encouraging good practice in research and its governance. Our analysis of the statements suggests that institutions of different types and sizes (e.g. different levels of income, different disciplinary focus) are engaging actively with research integrity.

The Concordat's reporting requirements are high-level in their articulation, which allows institutions to interpret them in ways that are meaningful to them. Whilst this provides significant flexibility and adaptability, it also leads to variability in what institutions choose to report. Additionally, the reporting burden will vary based on the maturity of the organisation and of its human and technical infrastructure, which contributes to the diversity of the statements analysed. It is also clear that some statements have been written with multiple purposes and audiences in mind (e.g. internal and external, governing bodies as well as broader academic community and third-party organisations), whilst others have been produced with a narrower focus (e.g. governing bodies only). All of this means that statements will reflect each institution's priorities, culture and resources.

The use of annual statements for multiple purposes reflects the nature of the Concordat and its requirements. There is or may be:

- an element of external compliance reporting (the existence of the annual statement and the reporting of misconduct cases);
- an element of progress monitoring, as part of institutional governance;
- an element of narrative discussion around enabling good practice, as a means of informing the institution's research community.

Given the breadth of approaches, annual statements are unlikely to be sufficient for transfer of practice: the level of detail provided does not enable third parties to understand how actions and activities have been operationalised and whether they are effective. Institutions are more likely to learn from each other through dialogue, for example via conferences and dedicated discussions. The new reporting template being piloted offers an opportunity to verify if annual statements could be more easily aggregated, including cross-institutional comparisons.

### CASE STUDIES

Cardiff University reported how their preparations for the Research Excellence Framework (REF) were used as an opportunity to embed ethics, integrity and inclusion-related themes into the wider research environment. This included providing a range of support and training programmes for REF reviewers, senior staff and staff with research integrity roles as well as updates to the institutional Code of Practice for REF 2021.

2

The Royal Central School of Speech and Drama reported how its sub-committee responsible for research ethics and integrity introduced a new standing item to discuss policy changes and emerging issues in the research integrity landscape. As a result, reports from external bodies like ARMA and DEMOS were discussed and informed processes, practices and priorities in the sub-committee and across the institution.

3

In early 2020, the <u>University of Salford</u> began migrating its internal and external websites to new platforms and took advantage of this opportunity to update, expand, and clarify information and guidance related to research integrity as well as to improve navigation and engagement. The refreshed website better allowed policies and procedures to be highlighted, shared and managed. This proved to be immediately valuable during the campus closure period related to Covid-19 when policies and procedures underwent rapid temporary changes and required widespread dissemination.

#2
ANNUAL STATEMENTS
SHOW EVIDENCE OF
INSTITUTIONS
LEARNING FROM
INVESTIGATIONS

### REPORTED MISCONDUCT

Data on misconduct allegations, investigations and outcomes are consistently provided by a majority of in-scope institutions, although this is not sufficiently consistent and detailed to allow indepth analysis. Most, but not all, annual statements include a reference to the institution's misconduct policy and/or procedure (63%), and 98% of statements (n=278) provide data on misconduct allegations, investigations and outcomes (including nulls, i.e. annual statements noting that no allegations had been recorded and no investigations had taken place). In our assessment, we could not identify any apparent patterns in misconduct cases in our sample, for example around institutions of a given size or from a specific region, or with significant focus on a given research subject. We also note that figures on outcomes (allegations upheld in part or in full) may be difficult to interpret as a time series, because some cases may be particularly complex to navigate and require significant time for investigation before an outcome is reached and actions are taken.

The scope of misconduct procedures and associated reporting varies, in particular whether postgraduate research students are treated (and hence reported) under the same procedure as staff or under a student-related procedure (often termed academic misconduct). This issue also applies to research undertaken by taught students. This leads, in some cases, to the need for interpretation in assessing annual statements, although most are clear in presenting their institutional figures. There is a second type of variation in scope, in that a small number of institutions capture and report concerns that have been raised and resolved informally, as well as reporting formal allegations and investigations. This illustrates the practice of seeking informal resolution before initiating formal proceedings (where possible), which is recommended by UKRIO.

### Reporting across annual statements

This table presents the number and share of annual statements that included at least one allegation, investigation or outcome. A majority of institutions reported at least one allegation each year. Of the remaining institutions, a small minority did not provide any detail on misconduct cases (two in 2019/2020, two in 2020/2021 and one in 2021/2022), while the rest declared that zero cases had arisen in the year. It should be noted that, in some cases, an institution may have reported zero allegations but one or more investigations, due to the multi-year nature of the process.

Category	2019/2020	2020/2021	2021/2022
Number of annual statements reviewed	97	104	82
Statements reporting at least one misconduct allegation	60 (62%)	60 (58%)	53 (65%)
Statements reporting at least one misconduct investigation	50 (52%)	53 (51%)	34 (41%)
Statements reporting at least one allegation upheld in full	22 (23%)	23 (22%)	13 (16%)
Statements reporting at least one allegation upheld in part	9 (9%)	6 (6%)	5 (6%)

### MISCONDUCT IN NUMBERS

Of the 283 annual statements analysed across all in-scope years, 187 report at least one misconduct allegation, investigation or outcome. Of these, 101, or 54%, provide a more detailed breakdown by type of misconduct. The most common cause of misconduct appears to be plagiarism, with 203 allegations reported in our dataset, followed by failure to meet legal, ethical and professional obligations (90 allegations) and misrepresentation (63 allegations).

There are a very small number of outlier institutions in terms of the number of allegations reported, reaching 20-60 allegations. These are not to be interpreted as institutions with significantly higher prevalence of research misconduct: the larger numbers arise from differences in the approaches taken to reporting, for example by including in these totals plagiarism cases by postgraduate research students or reporting a backlog of historical cases.

Finally, the multi-year nature of the allegation-investigation-outcome process needs to be borne in mind when viewing the data at both institutional and aggregated levels. Multi-institutional cases might also be reported in only one or each of the affected institutions, further complicating any aggregated analysis.

These considerations indicate that any quantitative assessment based on misconduct figures is likely to gloss over a wide range of nuances around institutional contexts and different approaches to reporting. As a result, misconduct figures should be treated carefully, acknowledging that the calculation of percentages or year-on-year trends will only be indicative.

### Challenges in identifying trends over time

This table presents a picture of allegations, investigations and outcomes identified in in-scope annual statements. Percentages are provided as an indication only, and it is difficult to provide an exact interpretation: because the allegation-investigation-outcome process may take more than a year, the figures reported by institutions may refer to different periods (e.g. investigations reported in 2020/2021 arising from an allegation reported in 2019/2020). Cases where individuals from different institutions are involved may appear multiple times, too, but cannot be detected due to the anonymity in reporting. As a result, it would be incorrect to conclude that, in 2019/2020, 26% of investigations led to an allegation upheld in full: this percentage only reflects the number of investigations reported in the year, which may have arisen in different years or include duplicates.

Category	2019/2020	2020/2021	2021/2022
Number of misconduct allegations	283	277	174
Number of investigations (as percentage of reported allegations in the period)	183 (65%)	154 (56%)	95 (55%)
Number of allegations upheld in full (as percentage of investigations)	47 (26%)	86 (56%)	21 (22%)
Number of allegations upheld in part (as percentage of investigations)	11 (6%)	7 (5%)	7 (7%)

### CASE STUDIES

Newcastle University reported that the commitment to ensure continued suitability of their misconduct process led to the implementation of lessons arising from research misconduct cases. The institution drew on previous cases for a review of misconduct procedures and practices. This led to updates to the misconduct policy and procedure and the creation of a new toolkit to ensure consistency across investigations.

While the <u>University of Worcester</u> reported no allegations of research misconduct in its 2021/2022 report, it recognised that this could reflect problems with the awareness of reporting mechanisms or the knowledge and confidence of individuals to make allegations. As a result, the University proactively tailored its new policy, paperwork, training and communications strategy in this area to address

these possible areas for improvement.

The <u>University of St Andrews</u> provides a table breaking down any questions asked, concerns raised, allegations received and ongoing investigations from the past four academic years. This data transparently illustrates formal and informal processes for managing misconduct concerns and is helpful in considering trends over time.

Falmouth University's 2021/2022 annual statement is a good example of transparency and provides clear mapping to a Concordat commitment. The document includes detailed tables with information on allegations by status of investigation, subject/discipline as well as type of misconduct alleged.

### ACTIONS FOLLOWING INVESTIGATIONS ARE TAILORED TO EACH INSTITUTION

Although not all annual statements comment on lessons learned from past investigations, we identified good practice in this area. Our thematic coding identified two typical scenarios that describe institutional activity to mitigate or prevent the occurrence of future cases: updates or revisions to the misconduct policy/procedure and the deployment of targeted training, either for specific disciplines/areas or on specific topics. The measures implemented by institutions following misconduct investigations vary significantly, as they relate to the specific features of the institution itself and of the case(s) that triggered the action. To help institutions reflect on their current practice, we present a range of examples of activities following misconduct cases.

### Queen's University Belfast (2019/2020)

To support the mental wellbeing of an individual accused of misconduct, an investigation was run at a slower pace. Regulations were then amended to ensure that mental wellbeing is considered in all misconduct cases.

### University of York (2019/2020)

Following three investigations of research students, the Academic Misconduct Policy was rewritten to clarify where the academic judgement lies, the relevance of mitigating circumstances, and the levels of plagiarism and consequent sanctions.

### University of Cambridge (2019/2020)

Two investigations led the university to considering new training activities. One referred to good practice sharing in the context of long-term studies, and the other to training on the management and curation of image data.

### University of Leicester (2020/2021)

On conclusion of a case, the need for a clearer process was noted. New guidance has been deployed for researchers, and standard operating procedures along with template letters have been developed to guide those conducting investigations.

### University of Surrey (2019/2020)

Building on queries to the research integrity team as well as multiple investigations, training was deployed concerning referencing, storage and accessibility of data, authorship and publication ethics.

### University of London (2020/2021)

Allegations against two nonstipendiary research fellows that led to their suspension were investigated following the existing academic misconduct policy. After these cases, a separate policy for dealing with nonstipendiary fellows was put into place.

### ANNUAL STATEMENTS TEND TO FOCUS ON GOOD RESEARCH PRACTICE

In line with the Concordat, 103 annual statements from 51 institutions mention good research practice. Beyond cases where good research practice is only mentioned as a high-level consideration in response to Concordat commitments, a number of institutions provide further information on this, for example in the following contexts:

- acknowledging the requirement for governance around good research practice as part of funder terms and conditions (e.g. UK Research and Innovation, charitable funding)
- promoting the availability of training events and/or guidance around good research practice, including in different disciplines
- highlighting the importance of good research practice as part of wider research culture initiatives, including links with research ethics, whistle-blowing, data protection, bullying and harassment, working with human participants and/or quality management
- developing mechanisms to address breaches of good research practice and prevent their future occurrence

It is also notable that about half of the annual statements analysed mention a code of practice for research: this is the case for 49 statements in 2019/2020 (51%), 49 statements in 2020/2021 (47%) and 38 statements in 2021/2022 (46%).

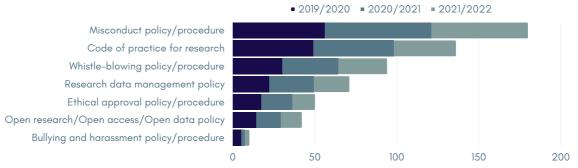
As part of our investigation, we also sought to identify annual statements with coverage of questionable research practices (6 annual statements from 6 institutions) and poor research practices (15 annual statements from 8 institutions), by using keyword searches. The number of annual statements using these terms is limited and, therefore, only narrative observations can be drawn. It should be noted that the Concordat to Support Research Integrity does not itself use this terminology, so this finding is consistent with the expectations set in the Concordat itself.

We found that annual statements tend to mention questionable and poor research practices (i) in the context of misconduct allegations; or (ii) as part of training and awareness raising efforts to encourage good research practice. In most cases, questionable and poor research practices are not seen as a sufficient reason to trigger a formal misconduct investigation and are likely to be discussed and resolved informally by the affected parties.

## #3 RESEARCH INTEGRITY IS PART OF BROADER DISCUSSIONS AROUND RESEARCH CULTURE

### INTEGRITY IS CLOSELY TIED TO OTHER FACETS OF GOOD RESEARCH GOVERNANCE

Annual statements include evidence of institutions promoting positive cultures that are conducive to research integrity. Annual statements typically refer to a range of policies, which are directly or indirectly related to research integrity. This highlights the importance placed on research governance, and that there is an understanding that integrity is part of a more complex discussion that touches on multiple facets of research design, delivery and management. It should be noted that the chart below does not indicate whether institutions have any of these policies in place, but only whether we have identified mentions of these in their annual research integrity statement.



Number of annual statements mentioning a policy/procedure with ties to research integrity (n=283)

Based on our review, it appears that institutions update their integrity policies and procedures regularly, although this happens in a responsive rather than proactive manner in most cases:

- some annual statements cover changes triggered by the introduction of other concordats, the <u>Declaration on Research Assessment (DORA)</u> or the <u>Nagoya protocol</u>
- some annual statements cover changes that have arisen from misconduct investigations, for example in the form of lessons learned and the ensuing updates to relevant policies, training, communications or other relevant institutional mechanisms
- some annual statements discuss policy and practice changes arising in the context of the COVID-19 pandemic, but it is not always clear whether these have been incorporated into business-as-usual or were only meant as temporary measures

The institutional focus on good practice and research culture tends to be disseminated widely to internal stakeholders, for example via news, policies, websites and newsletters. Annual statements include limited discussion of the reception of these communications by their intended audiences.

### CASE STUDIES

The University Ethics Panel at <u>Bath Spa</u>
<u>University</u> leads work to maintain and further develop a research culture of transparency, open communication and ongoing dialogue in relation to research integrity and ethics.

Appointing School Ethics Leads is described as having been transformative in achieving this objective and has led to a recognised change in practice, from taught programmes to research projects.

2

King's College London operates a programme of leadership on research integrity with a Research Integrity Champion at the senior level and Research Integrity Advisors at the faculty level. This framework is intended to recognise the strong connection researchers feel to their local environment and enables all research active members of staff at the University to have access to an individual cognisant of research integrity matters.

3

Leeds Beckett University provides a variety of training and development activities to enhance research culture. With support from Research England funding, the University launched a Black and Global Majority Researcher Network as a collaboration across services and school. The network aims to bring together emerging and established talent to span the University and foster interaction, collaboration, profileraising and career development.

4

Queen Margaret University drew on the results of the most recent iteration of the Culture, Employment and Development in Academic Research Survey (CEDARS) and benchmarked its research culture with other universities. These results helped the University identify priority areas for action, including the provision of additional training, researcher mentoring and links with external networks.

### CHAMPIONS OR ADVISORS PROVIDE SUPPORT IN SOME INSTITUTIONS

Among the annual statements analysed, 27 (from 16 institutions across most TRAC groups) mention the use of champions or advisors focusing on research integrity. There are three dimensions of variation in this type of provision:

- champions or advisors may hold different levels of seniority, from senior staff members to academics without a managerial role, with the latter being the norm
- the remit of champions or advisors varies widely, from a general focus on research integrity to more specific areas such as open research, open data or ethics
- the scope of champions or advisors may be institutional or local (e.g. school, department or faculty), and some institutions appoint champions or advisors at multiple levels

What champions or advisors do in practice is not consistent across institutions, and we did not detect clear trends. Examples of tasks that may be within the remit of a research integrity champion or advisor include:

- acting as a point of contact for reporting research misconduct
- raising awareness of good research practice and research integrity
- communicating university-level priorities to staff and colleagues
- liaising between a local entity and a governing body

Other potentially helpful support structures mentioned in annual statements include the creation of a research culture steering board or similar working groups; and cross-membership of integrity leads across relevant institutional bodies such as ethics committees or processes.

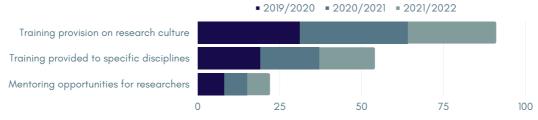
Although annual statements suggest that practices are developing positively across the sector, there is limited evidence of assessment of what works and of whether the provision put in place is achieving the intended aims. The diversity of institutional structures makes it difficult to compare choices and initiatives across different organisations: each institution should consider whether it is appropriate to create these or similar mechanisms to support research integrity. For example, for some institutions, such layers of advice or leadership may be unnecessarily complex, and for some represent a burden disproportionate to their research activity.

#4 **SUPPORT AND** TRAINING ON **RESEARCH INTEGRITY ARE FOCUSED ON EARLY CAREER STAGES** 

### TRAINING ON RESEARCH INTEGRITY IS COVERED IN MOST STATEMENTS

A significant majority of annual statements (89%) report on training provision related to research integrity, across a range of delivery mechanisms such as online or in-person training, handbooks and other forms of self-paced learning. It is of course difficult to compare training mechanisms offered by different institutions, as these are expected to be tailored to the needs of local researchers and staff.

It is, however, possible to look at high-level trends: as part of our review, we tagged examples of support or training provision in several areas, finding that training on research culture and training provided to specific disciplines are frequently mentioned in annual statements. Our analysis identified a total of 22 mentions of mentoring opportunities, a mechanism highlighted in the Concordat and recognised as good practice in researcher training.



Number of annual statements mentioning a policy/procedure with ties to research integrity (n=283)

Training on research integrity is typically presented as being for postgraduate or early career researchers, but also includes new supervisors and new staff, for example as part of the onboarding process. There is an often unspoken implication that training is also available to more senior individuals should they wish to access it, but we did not find evidence of this being a widespread occurrence or a pathway that institutions pursue proactively.

As one would expect, high-level training is in many cases provided by central services, whereas discipline-specific considerations (e.g. how research integrity affects a given research approach or type of experiment) are delivered within individual academic units such as departments or faculties.

### CASE STUDIES

The University of Portsmouth reports a variety of mechanisms for the support and training of researchers, including workshops, networks and an institution-wide mentor matching system. These support and training mechanisms engage a range of job roles including teaching fellows, technical specialists, scientific officers and librarians.

In response to the Covid-19 pandemic, the University of East London delivered research integrity and ethics training online, which led to a significant uplift in the number of attendees across Schools and institutional services. As part of online training provision, the University makes it mandatory for all postgraduate students to complete research integrity modules before registering their research project.

The University of Strathclyde details a range of training programmes and resources available to postgraduate researchers as well as early career, mid-career and established academics. These include methods training, personal, professional, leadership, knowledge exchange and career management skills and dedicated research integrity training. These programmes are designed to empower researchers and facilitate their development as well as to act as a means of assuring and enhancing research quality.

### #5

### THE EFFECTIVENESS OF **RESEARCH INTEGRITY ACTIVITIES IS NOT FORMALLY MONITORED**

### THE EVIDENCE IN **ANNUAL STATEMENTS** IS MAINLY IN NARRATIVE FORM

Annual statements are, in most cases, presenting the institution's views on research integrity and related activities, with no or limited supporting evidence. For example, only a minority of annual statements discuss formal assessments such as external reviews or audits with clear recommendations and actions, and most are simply reporting on what has taken place in the last reporting year. This is in line with the expectations in the current version of the Concordat: there is no stated requirement for institutions to evaluate their own performance, and hence annual statements do not necessarily address this. This finding also means that any information reported in annual statements must be taken at face value, with limited evidence that activities, training or policies are fit for purpose. The amount of formal reporting available around research integrity is not surprising, as the area is very much in development, as noted in our prior work on research integrity indicators.

Some of the areas covered in annual statements lend themselves to more nuanced tracking, although institutions do not typically provide this. An example of detailed reporting in annual statements is training uptake, which has been reported on in detail in a very small number of cases, covering dates of each training event as well as numbers of attendees and their internal affiliation. Expecting data collection at this level from all institutions is likely to be perceived as an unreasonable burden, but clearly affects a reader's ability to assess the quality, impact and reach of research integrity-related provision within an institution.

Many annual statements do illustrate progress on issues from one report to the next, including changes and updates driven for example by internal factors (e.g. gap analysis), misconduct investigations or external policy or environmental changes. This suggests that institutions are not considering annual statements as a cursory activity, but rather taking stock of progress since their previous statement: there is evidence of institutions learning, adapting and focusing as necessary through the cycle of reports that have been examined. The above observations on the availability of evidence clearly refer to reading annual statements as an external observer, and our analysis indicates that, within an institution, the contents of the report will be more easily assessed and validated given the closer understanding of the local context.

### CASE STUDIES

<u>Ulster University</u> reported a system for routine auditing of all studies, with increased auditing of studies regulated under the Human Tissue Act or involving human material. These audits focus on adherence to the approved protocol, consent, retention of documentation, data and sample storage, and the progress of individual projects. These audits did not find significant issues but made recommendations for minor improvements.

Keele University conducted an institution-wide survey in 2020/2021, focusing on awareness, understanding and engagement with various open research practices. Data from this survey, broken down by faculty and career stage, helped identify priorities for training, development and support as well as to develop an Open Research Action Plan.

Canterbury Christ Church University described its approach to Research and Enterprise Quality Improvement and Enhancement, which integrates a range of previously disparate research quality monitoring and reporting processes. These include reporting at the faculty level, which is then considered and scrutinised before being received by the Research & Enterprise Integrity Committee and endorsed by Academic Strategy Committee.

Edinburgh Napier University used the UKRIO self-assessment rubric to identify opportunities for improvement and targeted ethics review as an area for attention. This led the University to trialling two processes, one focusing on auditing random applications and one asking researchers with previously approved ethics forms to detail any changes that occurred since the original application was made.

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### **OBSERVATIONS FOR FUTURE REVIEWS**

Annual research integrity reports are a unique and rich source of information about research integrity provision. The evidence we examined suggests that reviewing institutional annual statements can help the Committee on Research Integrity and the Research Integrity Concordat Signatories Group in their own annual statement and in maintaining an understanding of the direction of travel of higher education institutions in the UK. However, there are some key features that make such an assessment a burdensome exercise, which requires significant manual analysis and interpretation. We note the following key issues for consideration.

### Enhanced discoverability of annual statements could help in better understanding progress

A majority of annual statements describe the institution's journey and developments around research integrity. Signposting statements and making them more easily discoverable would help peers identify good practice and the Committee in understanding the state of play in the UK.

### Past annual statements are sometimes replaced or deleted from institutional websites

In some cases, we were able to find older annual statements that had been replaced on institutional websites via the use of search engines. This is a burdensome activity, and it would be best if institutions made all statements available in a single webpage.

### The use of templates would enable improved analysis of institutional annual statements

Diverse reporting formats reflect the nature of institutions. However, building a coherent picture of research integrity requires more consistency, including in terms of the scope of researchers considered in the reporting. More widespread adoption of a template is likely to significantly streamline analysis.

### The intended audiences for annual statements would benefit from clarification and alignment

Institutions report to different audiences, internally and externally, with a clear impact on the format and focus of statements. The Committee and the Research Integrity Concordat Signatories Group may wish to provide guidance on this aspect, to achieve more alignment and enable comparison.

### Storytelling is likely to remain the most appropriate approach to describing progress

We have captured and presented quantitative information, but with significant caveats. Although quantification is helpful, at a glance, qualitative and narrative information remains more appropriate to share and promote good practice.

### **CONCLUSIONS**

Our examination of annual research integrity statements demonstrates a positive outlook for the state of research integrity in the UK. Annual statements present a broad range of activities, tailored to specific institutional contexts, and there is evidence of learning, improvement and transformation over time. It is important to note that research integrity is considered as part of broader discussions around research culture, which highlights links with leadership, governance and other facets of good research practice.

We found that support and training mechanisms are reported on by a majority of annual statements, although the effectiveness of these as well as other integrity-related activities are not typically discussed. While the strength of evidence provided by institutions may vary, the level of activity surrounding research integrity is noteworthy in its own right.

A significant majority of institutions we considered are generating annual statements in accordance with Concordat expectations. However, consolidating these statements for the purposes of comparison or generating comprehensive observations regarding the state of research integrity across all institutions is challenging, due to the significant differences between institutions in terms of size, culture, processes, research and teaching intensity and disciplinary focus. Therefore, the greatest value of such statements in their current format is in the presentation of narrative examples of positive practices.

To facilitate future reporting and promote the Committee's capacity to comprehend the broader UK landscape, we believe that the recently created template should be more widely utilised. The template should be viewed as a guide for institutions rather than as an attempt to impose strictly standardised reporting requirements. Local context remains a priority when addressing research integrity and reporting mechanisms should reflect this.

With continued engagement from the sector, the Committee and the Research Integrity Concordat Signatories Group can endorse practices that aid system-level analysis and reporting and, more importantly, drive even deeper alignment with the principles in the Concordat to Support Research Integrity.



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### UK Research Integrity Concordat Signatories





















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