

Protocol for a Delphi survey on Fostering Accountability for the Integrity of Research Studies (FAIRS):

Attitudes to sanctions for academic fraud among different constituencies

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Introduction

Research progress depends on trust. It is often assumed that fraud is rare and does not cause lasting damage because "science is self-correcting". It is becoming clear, however, that this rosy picture is mistaken. First, there have been several high-profile cases of eminent researchers whose work has been found to be fraudulent (for recent examples see Landau-Taylor, 2024; Piller, 2024). Second, studies have shown that publishers are often slow to retract flawed work (Byrne et al., 2020) and if authors are notified that they have cited retracted papers in reviews or guidelines, they are unlikely to act (Avenell, Bolland, Gamble, & Grey, 2024). Third, there has been growth of "paper mills", commercial operations that commit fraud on an industrial scale by offering publications for sale, sometimes colluding with corrupt editors to place articles (Abalkina & Bishop, 2022; Byrne et al., 2022; COPE & STM, 2022). The seriousness of the threat from paper mills became evident in 2023 when the publisher Wiley, retracted over 8,000 articles (Kincaid, 2023), and shut down its Hindawi publishing branch.

Whereas a great deal has been written in the past decade about Questionable Research Practices (QRPs), far less attention has been given to academic fraud, typically defined to encompass research activities that involve falsification, fabrication and plagiarism. Although the lines between QRPs and fraud can be blurred, our focus here is on appropriate forms of response to cases where there is clear misconduct by this definition, rather than suboptimal practices or honest error.

In responding to fraud, there is a sense of tension between two constituencies. On the one hand, there is a body of volunteer "sleuths" who report on fraudulent work and try to get it retracted. Most sources of information about sleuth activities are scattered and are not in peer-reviewed papers, with the bulk of evidence reported on the post-publication peer review website PubPeer. On the other hand, we have what may be termed "the establishment": publishers, academic institutions and funders who are seen as responsible for dealing with cases of fraud. They often appear to struggle to respond to new developments such as paper mills, and have been criticised for not

doing enough. As an example, Paolo Macchiarini published fraudulent claims that an experimental stem cell treatment was successful, leading to direct harm to patients. It took five years before he was convicted and fraudulent papers were retracted (Oransky, 2023). Meanwhile, criticisms of Macchiarini's collaborators have been ignored (Delaere, 2020) and those who acted as whistleblowers underwent years of stress and vilification (Elliott, 2024).

Unlike sleuths, who can rapidly respond to apparent cases of fraud, the establishment has to ensure due process is followed, that malicious or trivial complaints are distinguished from plausible accusations of misconduct, that accused and accusers get a fair hearing, and that any actions they take are properly regulated. Again, much of what has been written about these issues is found in formal reports and regulations rather than the regular academic literature. Some actions have focused on prevention of fraud: publishers have joined forces to improve the identification of fraudulent papers before they get published, and institutions have started to change their criteria for hiring, firing and promotion to reduce incentives to commit fraud. However, there is little agreement about whose responsibility it is to investigate accusations of fraud and what sanctions should be applied when fraud is proven. Institutions have to be sensitive to resource demands and legal implications of actions that they take. Funders, institutions and publishers may have conflicts of interest in these processes driven by financial considerations.

These issues were included in the agenda of UK Government Select Committees in 2018 and 2022. The House of Commons Science and Technology Select Committee (2018) report recommended that UKRI should establish a national committee on research integrity, and in 2021 the UK Committee on Research Integrity (CORI) was formed. CORI's brief did not, however, extend to regulation or determining sanctions. Indeed, as noted in the House of Commons Science, Innovation and Technology Select Committee report (2023), the Chief Executive of UKRI argued against such a role: "it would be better, in the context of supporting research integrity in those institutes, if the investigatory and regulatory powers were outside our walls". Given that in the UK no other central organisation has such investigatory or regulatory powers, dealing with fraud is left to universities, who may lack resources and expertise, particularly when dealing with new developments such as paper mills or use of AI to generate fraudulent papers, who are likely to have conflict of interest, and who may be reluctant to apply sanctions, even when fraud is clearcut, because of concerns about litigation.

The impression is that similar concerns have been discussed in many other countries. A report by the National Health and Medical Research Council of Australia (2023) surveyed practices in nine different international jurisdictions and found a wide range of regulatory frameworks. There is substantial individual variation across countries in terms of activity, including by paper mills (Van Noorden, 2023). These were first identified in China, but notable activity has also been found in India, Iran, Russia, and Ukraine. Chinese institutions have taken steps to counteract these, concerned about damage to the reputation of Chinese research (Mallapaty, 2024). It is unfortunate that, just at a time when efforts are being made to embrace a more diverse range of scholars and make research less of an exclusive "club" for white, Western academics, the

activities of fraudsters feed prejudices against Eastern Europe and the Global South. Once fraudulent behaviour becomes normative, it becomes impossible for honest researchers to succeed in a country, because research funds and tenure will go to those who have built up a body of publications through dishonest means. Ensuring fraud does not pay is thus an issue of equity as well as integrity.

Perspectives on what can and should be done about fraud are likely to differ, depending on whether the respondent is a victim of fraud, a whistleblower, a principal investigator at a busy lab, an academic publisher, a university integrity officer, a research funder, a lawyer, or a government representative. Those who uncover fraud or are victims of fraud typically feel that institutions are slow to respond and sanctions for fraud are inadequate. On the other hand, those at the sharp end of responding to accusations of fraud may have concerns that accusations of fraud could be unfounded, and that transparency about discoveries of fraud could do more harm than good, by causing reputational damage to a whole institution, by exposing the institution to legal challenges, and by damaging trust in research. There is debate as to whether academic fraud should be regarded as a criminal matter, or whether this would create adverse unintended consequences (Bhutta & Crane, 2014). Behind all these considerations are questions of resources: if one wants to respond appropriately and effectively to cases of fraud, then this requires devoting time and money to investigations by experts, and raises issues about who has the authority to impose sanctions and seek redress and who should pay for investigations.

Approach

We will use a two-stage Delphi method to gather both quantitative and qualitative responses to a set of statements around this topic. The aim of this Delphi project is to prepare the ground for a discussion meeting in April 2025 that will bring together representatives of these different constituencies to identify points of agreement and disagreement about appropriate actions to take when someone is accused of research fraud. The ultimate goal is to produce a report with recommendations for new ways forward. We do not anticipate that the Delphi project will achieve consensus, but it should clarify which are the issues where there is broad agreement, and which are contentious. This will expose participants to alternative points of view prior to an in-person meeting and allow us to focus our in-depth discussion on issues on which there is disagreement.

The Delphi method (Hasson, Keeney & McKenna, 2000) is an approach to consensus-building that has the advantage that it can include a wide range of opinions without it being necessary for individuals to meet in person. We plan an approach whereby individuals complete an online survey which allows them to quantify strength of agreement on a Likert scale, and also to add textual comments to justify their position. After one round, moderators assemble the responses and each panel member receives feedback showing how their response compares with that of (anonymised) other respondents. The moderators can, at this point, drop or modify problematic items; for instance, if it seems that a statement is being interpreted differently by different panel members, rewording may be used for clarification. Statements may also be combined if

they seem redundant, or split up if they contain too many different ideas. Panel members are then sent a summary of round 1 results, plus revised items for round 2, with a document explaining the rationale for any changes. In round 2, they then have the opportunity to change their response or provide further justification for their position. The moderators write a report on round 2, again presenting the statistics on frequencies of responses to different items, and providing a textual synthesis on points of agreement and disagreement.

Ethical approval will be sought from University of Oxford Central Research Ethics Committee (CUREC).

Methods

The key questions for any Delphi method concern selection of the moderators and expert panel, selection of the statements to be evaluated, and criteria for deciding on which items to retain, reject or modify. A three-member Advisory board will advise on these issues, including an expert on Delphi methodology, a senior research scientist, and an expert in research integrity:

Paula Williamson (Chair), Professor of Biostatistics, University of Liverpool, UK.

Csaba Szabo, Head of the Pharmacology Section and President of the Department of Oncology, Microbiology and Immunology (OMI), University of Fribourg, Switzerland.

Andrew Paskevich, Director of Academic and Research Integrity, Office of the Chief Scientific Officer, Perelman School of Medicine, University of Pennsylvania, USA.

Moderators

The moderators are responsible for running an initial exercise to determine which statements are included in the Delphi, for selecting the expert panel, and for deciding which statements should be retained, dropped or modified between stage 1 and 2 of the Delphi. They do not themselves participate in rating of any statements, but they are experts in the area and therefore able to evaluate qualitative responses by panel members.

Dorothy Bishop: researcher in the field of neuropsychology, with an interest in research integrity and fraud, involved in acting as a research sleuth since retirement.

Patricia Murray: expert in stem cell biology, with a particular interest in research misconduct around medical interventions and devices.

Shaun Khoo: a university administrator who has worked as a research integrity officer in Australia, and is familiar with conducting investigations.

Stephanie Neave, Chief Executive Officer at UK Research Integrity Office (UKRIO).

Selection of statements for inclusion

An initial pool of statements will be assembled by the moderators, using a range of sources from the peer-reviewed literature and the grey literature. The ideal length of the Delphi will be no more than 40 items, as response rates decline with number of items (Gargon et al., 2019). If the moderators find it difficult to agree on an initial pool within

this length limit, then we will add a stage where panel members are polled to see which items are most important to include.

Selection of panel members

A core sample of potential panelists was already identified when planning for an academic meeting to be held on this topic in 2025, and we will use snowball sampling to extend this, writing to these individuals with our desired criteria for respondents, and asking them to nominate suitable people. We anticipate a maximum panel size of 100, while achieving representation of different constituencies as defined below, though the panel could be larger if more people were enthusiastic to take part.

The goal will be to include panel members to cover all the constituencies listed in the introduction, which will be subdivided into two groups that may be expected to respond differently to the survey:

Group 1: a) victims of research fraud, b) whistleblowers, c) sleuths/forensic metascientists

Group 2: d) integrity staff of academic publishers, e) university integrity officers, f) research funders, g) lawyers, and h) government representatives.

A further group, active researchers, will be recruited and asked to self-identify as to whether they feel more common ground with Group 1 or Group 2.

We will rely on individuals' self-descriptions to assign them to these categories. The goal will be to recruit at least 3 representatives of each of these constituencies, and, across the whole panel to include representatives from all five continents, with no more than 75% representation of males or females overall. It would be too difficult to impose criteria regarding demographic characteristics for each constituency, but the goal would be to ensure a good demographic mix for the panel as a whole. Panel members would need to be fluent in English, as we do not have resources for translation.

Individuals will be invited to express interest in taking part via personalised email describing the Delphi survey. We will monitor recruitment across stakeholder groups and geographical location and will attempt to improve recruitment for groups in which recruitment numbers are low by targeting potential participants in these groups. We will categorise panel members into two larger groups: (Group 1) those who are responsible for responding to reports of misconduct, and/or devising incentives/organisations to reduce misconduct (d to h above), and (Group 2) those who focus on detection and reporting of fraud, or who run labs where there is a concern that fraud could occur (a to c above). We aim to include at least 30 expert panel members in each of the two groups, but if more eligible people want to take part, we will include them, provided we can do this without having more than 75% from group 1 or 2.

Procedure

Initial pool of possible statements for stage 1

A preliminary pool of items was generated by Dorothy Bishop, using three approaches. First, most statements were devised to cover important and possibly controversial

issues that were discussed in academic articles and institutional and governmental reports on this topic. Second, the website <https://lmarena.ai/> was used to gather AI-generated responses to the prompt: "Create statements for a Delphi project on the topic of how institutions respond to academic fraud." The results came from two models: gpt-4o-2024-05-13 or engine-test. Third, additional items were created to cover additional aspects that were deemed potentially relevant.

Items were broadly grouped into 7 categories; this was a subjective judgement.

Categories

- A. Definitions; Nature and prevalence of fraud; Need for action
- B. Whose responsibility is it to investigate fraud? Role of institutions
- C. Alternatives/additions to self-regulation; role of government, publishers, funders
- D. Sanctions for fraud
- E. Protection for (a) accused and (b) whistleblowers/complainants
- F. Transparency
- G. Unintended consequences/barriers to progress

This preliminary pool is shown in Appendix 1.

This pool will be taken as a starting point for discussion with the Advisory board and Moderators, who conduct pilots and discuss which items should be included or excluded and recommend improvements to the wording. This will be used to create up to 40 items to be used for the first round of the Delphi exercise.

Round 1

People who express interest in joining the panel will be asked to complete a short form asking for basic background and demographic information, to allow categorisation based on domain(s) of expertise. Those selected for the panel will receive a personalised email providing a link to the survey, which will be implemented online using JISC online surveys. In round 1, respondents will be asked to score each statement from 1 (strongly disagree) to 5 (strongly agree). A free-text box will accompany each statement, so that participants may leave any general comments (such as, an explanation for their assessment or suggestions to modify the wording). The survey is anonymous and respondents will be advised not to include any identifying information in their responses.

Moderator evaluation

The moderators will meet to scrutinise the pattern of responses and the text comments. In a typical Delphi, items are rejected if agreement is poor. This would not be appropriate for this study, where we aim to identify items where Group 1 and Group 2 disagree. We will, therefore adopt a more complex set of rules, as follows:

- a) Statements where 80% of both Group 1 and Group 2 agree (responses coded 4 or 5) will be candidates for retention

b) Where agreement is less than this, we will test whether level of agreement is related to whether respondents come from Group 1 or Group 2. If either group achieves 80% agreement, the item will be a candidate for retention

c) Statements with 60% or less agreement in both Groups will be candidates for removal.

d) Remaining statements not meeting criteria a-c will be retained.

After this preliminary categorisation, all statements will be scrutinised to consider whether it is likely that stronger consensus might be obtained by rewording. At this point, statements can be split up, merged, or reworded. All decisions at this point will be made by moderators who will provide a written justification for the decision that will be transparently reported. In addition, relevant and constructive comments from panel members will be incorporated in the explanation of statements that go forward to round 2.

Round 2

Panel members will be presented with a report showing both their own scores and the anonymised distribution of scores from other panel members, together with a summary of free text comments.

Panel members will be asked to complete the revised survey in light of this feedback. The round 2 survey will again include a free-text box for each statement so that respondents may elaborate on their responses.

Analysis

Scores for each statement from round 2 will be summarised for the overall panel and separately for Groups 1 and 2, showing the mean, median and distribution of responses. Statements will be categorised as in stage 1 into

- those where there is overall consensus (categorised a above)
- those where there is disagreement between Group 1 and Group 2 (categorised as b above)
- those where there is less predictable disagreement. (categorised as d above).

In addition, stage 1 responses for those who did or did not respond at stage 2 will be compared, to see if there is any bias in terms of who continues to stage 2.

Discussion meeting

The report summarising stage 2 results will be the main input for a discussion meeting where panel members and additional interested parties will meet in a hybrid online/in person format with the goal of writing recommendations in a position paper to be published in a peer-reviewed journal.

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Appendix 1: preliminary pool of items, with sources.

We plan to reduce this pool to no more than 40 items.

Items are broadly grouped into 7 categories; this is a subjective judgement.

Categories

- A. Definitions; Nature and prevalence of fraud; Need for action
- B. Whose responsibility is it to investigate fraud? Role of institutions
- C. Alternatives/additions to self-regulation; role of government, publishers, funders
- D. Sanctions for fraud
- E. Protection for (a) accused and (b) whistleblowers/complainants
- F. Transparency
- G. Unintended consequences/barriers to progress

NB. "Source ref" this does not mean the source document necessarily agrees with the statement - rather, it is an issue that is discussed in the source. References to sources given below.

| Item type | Statement | Source ref* |
|-----------|--|--|
| A | 1. We need global clarity on what research misconduct is, how allegations should be handled, and which sanctions are appropriate. | Dal-Ré et al; 2020 |
| A | 2. It is important to distinguish research fraud from other kinds of research misconduct | Dal-Ré et al; 2020 |
| A | 3. Intentionality is a defining feature of research misconduct | Bouter 2024 |
| A | 4. Research fraud is a serious and growing problem | Bouter 2024; Kornfeld & Titus; Balon et al., 2024 |
| A | 5. Fraudulent research causes harms to consumers of research, to other researchers and to trust in research | Bhutta & Crane, 2014; |
| A | 6. The primary goal of responding to academic fraud should be to maintain academic integrity, not solely to punish offenders. | AI-generated item (engine-test) |
| A | 7. The lack of consistent data collection and reporting within the UK hampers our ability to form a complete picture of the frequency and nature of research misconduct. | UKRIO barriers report (Brown et al 2024) |
| A | 8. Fraud attracts a lot of attention but it is relatively rare, and attempts to prevent it may do more harm than good (e.g. by increasing bureaucracy). | Bhutta & Crane, 2014 |

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| A | 9. A significant proportion of complaints about fraud are vexatious or otherwise unsupported | UKRIO barriers; Caron et al, 2024; |
| A | 10. Researchers would be less likely to commit fraud if there were a greater probability of being detected and punished | Kornfeld & Titus |
| A | 11. We need shifts in research culture to destigmatise research misconduct | UKRIO barriers |
| A | 12. The language used in policies and procedures stigmatises both the people who raise concerns and the people who go through an initial investigation, causing others to back away from making disclosures. | UKRIO barriers |
| A | 13. We need to work towards collecting information that assesses or describes elements of effective governance arrangements for research integrity | NHMRC report |
| A | 14. We should aim for international coordination in how cases of research fraud are handled | (implicit in NHMRC report) |
| A | 15. Social media has played an important role in highlighting fraud | |
| A | 16. Social media encourages anonymous and/or vexatious individuals to raise unwarranted complaints | Caron et al, 2024; |
| A | 17. There is a widespread perception that official channels for reporting misconduct are often slow and obstructive | UKRIO barriers; Bouter 2024; Oransky & Marcus; Wager 2011 |
| B | 18. Terms and conditions applied to researchers are not a matter for Government | UK Sci Tech Committee 2018 (based on quote from government minister) |
| B | 19. "While the Government should not seek to interfere directly in research matters or compromise the independence of universities, it should nevertheless maintain an active interest in supporting research integrity and ensuring that all elements of self-regulation are functioning well in order to get the best value possible from public investment" | UK Sci Tech Committee 2018 |

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| B | 20. We need robust systems for investigating allegations of research misconduct, and then communicating and learning from the outcomes of those investigations. | UKCORI, p 29 |
| B | 21. Institutions can be incentivised to follow integrity guidelines by linking this with eligibility for government funding | UK Sci Tech Committee 2018 |
| B | 22. Funders should be responsible for assuring institutional compliance with research integrity regulations as a condition of funding | UK Sci Tech Committee 2018 |
| B | 23. Institutions should conduct regular unannounced audits and assessments of academic work, processes, and publications to prevent, identify and address potential fraud proactively. | AI-generated item (gpt-4o-2024-05-13) |
| B | 24. The regulatory burden of ensuring compliance could be reduced by taking a 'dipstick' approach, i.e. auditing a subset of institutions | UK Sci Tech Committee 2018 |
| B | 25. Academic institutions should be responsible for training of all their staff and students in research integrity, via online training modules, mentorship and on-the-ground learning | NHMRC report |
| B | 26. Training is required for those undertaking research misconduct investigations | UKRIO barriers |
| B | 27. The research community should adopt a standardised set of requirements and procedures detailing how allegations of research misconduct are investigated and reported | UKRIO barriers; US-HHS 2024 \$93.302 |
| B | 28. The optimal method for dealing with fraud is a self-regulation model, where academic institutions are responsible for conducting investigations when one of their staff is accused. | NHMRC report fig 1 (self-regulation option, see UK case study) |
| B | 29. The same model should be used for accusations of fraud by students as for accusations of fraud by academic staff | |
| B | 30. It can be problematic for academic institutions to investigate allegations of fraud by their employees or students because of conflict of interest | Roy & Edwards; Gunsalus et al. |
| B | 31. Investigating fraud poses a considerable burden on academic institutions, in terms of | UKRIO barriers; Caron et al, |

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| | staff time, need for appropriate expertise, and financial costs | 2024; Bhutta & Crane, 2014 |
| B. | 32. There should be a statute of limitations, so that institutions are not generally required to investigate allegations of misconduct that date back many years unless there is a risk to public health or safety (in the US-HHS regulations, this is a 6 year period) | US-HSS 2024 \$93.104 |
| | 33. Institutions have a duty to investigate all publications from a researcher found to have committed misconduct, and ensure all affected publications are corrected/retracted | |
| B | 34. External panel members in misconduct investigations should be mandatory | UKRIO barriers |
| B | 35. Employers should check for past misconduct, and previous employers should fully disclose such information | UK Sci Tech Committee |
| B | 36. Employers should avoid “the inappropriate use of legal instruments, such as non-disclosure agreements” | UKRIO barriers |
| B | 37. Academic institutions may be deterred from investigating fraud because of concerns about reputational damage | Bhutta & Crane, 2014; Dal-Ré et al, 2020; |
| B | 38. Academic institutions may be deterred from investigating fraud because of concerns about litigation | Bhutta & Crane, 2014 |
| C | 39. It is more important to focus on changing incentives so that researchers won't be motivated to commit fraud than to put resources into tackling fraud after it has occurred. | Bouter 2024; House of Commons, 2023; |
| C | 40. Government should develop the infrastructure needed to collect and report on research misconduct cases nationally. This would not only enable a better understanding of its prevalence and underlying drivers, but also facilitate monitoring and evaluation of any processes, procedures, or training adopted | UKRIO barriers |
| C | 41. Any system for investigating academic fraud should apply to all research however funded, including that by commercial organisations, | Bouter, 2024 |

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| C | 42. It is the responsibility of publishers to retract papers within 2 months when a credible accusation of fraud has been made | |
| C | 43. Papers should be retracted by publishers if there is clear evidence of fraud. They should not be "corrected" | |
| C | 44. There should be funding sanctions against academic institutions that fail to investigate cases of fraud in a timely manner and/or are not transparent in reporting on such investigations | Kornfeld & Titus |
| C | 45. The optimal model for investigating fraud is one where an independent body funded and regulated by government investigates fraud and imposes sanctions when it is confirmed | NHMRC report fig 1(government regulation option - see Denmark and Sweden case studies); HOC Select committee report 2023 |
| C | 46. There is a need for an independent body to investigate academic fraud but it should be independent of government | |
| C | 47. Some form of national research integrity forum such as UKCORI in the UK, is important to ensure all institutions work to a common framework; it is not regulatory but aims to improve research practices | NHMRC report (Republic of Ireland case study);l UKCORI 2024, p 6 |
| C | 48. Funder research requirements can be used drive good practice | |
| C | 49. National research funders should invest in AI systems to automate discovery of fraudulent work | |
| C | 50. In the UK, the Research Excellence Framework, which is conducted once or twice per decade, can be used to incentivise institutions to take research integrity seriously, and to disincentivise drivers to misconduct. | |
| C | 51. A database of researchers who have published fraudulent studies should be considered | Balon et al, 2024; |
| D | 52. Institutions should prioritize preventative measures (e.g., educational workshops, clear policies) over reactive measures (e.g., | AI-generated item (gpt-4o-2024-05-13) |

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| | investigations, sanctions) in addressing academic fraud. | |
| D | 53. When a researcher is found to have committed fraud, they should undergo remedial education and training to improve understanding of research integrity. (Incorporating restorative justice approaches, where appropriate, can help rehabilitate individuals involved in academic fraud and restore trust within the academic community.) | NHMRC report (Japan case study) + (AI generated item, gpt-4o-2024-05-13)) |
| D | 54. When there is incontrovertible evidence that a researcher has committed research fraud they should be fired | Roy & Edwards |
| D | 55. Funding agencies should not be involved in investigating research fraud but they may apply sanctions for those found to have committed fraud | NHMRC report (Canada case study) |
| D | 56. Where a researcher is found to have committed fraud the academic institution administering research funds should be required to reimburse the funder | NHMRC report (Canada case study) |
| E | 57. There is insufficient protection for whistleblowers who report fraud | Kornfeld & Titus |
| E | 58. There are strong disincentives for researchers to report fraud by colleagues | Kornfeld & Titus |
| E | 59. Those accused of fraud should have their identities protected | |
| E | 60. Those accused of fraud should be assumed to be innocent until a high standard of confirmatory evidence is found | UKRIO barriers; see also US-HHS \$93.105 |
| E | 61. Even where there is clear evidence of fraud, it may be difficult to establish which member of a research team is responsible | |
| E | 62. It is important to be aware of and mitigate collateral damage that may be caused to other members of a research group if one member is found to have committed fraud | |
| F | 63. Whistleblowers should have their identities protected, with confidential channels for reporting suspected fraud | NHMRC report - see Singapore case study |
| F | 64. Institutions should be obliged to report transparently on all fraud investigations once they are concluded | NHMRC report, UK case study. UKCORI 2024 House of Commons, |

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| | | 2018. Also US-HHS 2024 \$93.106; Gunsalas et al. |
| F | 65. Lack of investigations for fraud should not inspire confidence in the institution: rather it suggests the institution is not addressing the issue properly | House of Commons, 2018 |
| F | 66. Institutions should collaborate with other educational institutions and professional bodies to share best practices and develop unified standards for addressing academic fraud. | AI generated item (gpt-4o-2024- 05-13) |
| F | 67. Employers, funders and publishers of research need to be legally able to share information to support investigations of misconduct. | House of Commons, 2018 |
| F | 68. Confidence in the process is increased if a final report and all records of the evidence in a research fraud investigation are made public with appropriate redactions. (See Gino vs Harvard case for precedent) | Kennedy, 2024 |
| F | 69. There should be legal consequences for academic fraud | Roy & Edwards; Bhutta & Crane, 2014; Dal-Ré et al, 2020 |
| G | 70. There is a danger that focusing on research fraud causes reputational harm to science, that can be used by those “interested in attacking scientific findings they consider ideologically uncongenial.” | Hilgard & Jamieson 2017 |
| G | 71. It is inadvisable to involve lawyers in investigating research fraud because the expense is unsustainable for most institutions | Kennedy, 2024 |
| G | 72. Before any new approach to research integrity governance is introduced there should be a full audit of costs and benefits, both financial and other | (implicit in NHMRC report) |
| G | 73. Investigations of fraud divert researchers and associated resources from more productive scientific work | Kennedy, 2024 |
| G | 74. Any attempt to create better structures to investigate fraud will be weaponised by those with political agendas | Roy & Edwards; Bhutta & Crane, 2014 |

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| G | 75. Public confidence in the research sector is undermined in high-profile breaches of research integrity | NHMRC report |
| G | 76. There is a shortage of well-trained research integrity experts who can be involved in investigations of potential fraud | |
| G | 77. "One of the likely drivers of trust and distrust in research is the way research institutes, publishers, and funders respond to allegations of research misconduct" | Bouter 2024 |
| G | 78. Trying to enforce accountability by criminalising research fraud would not improve trust—it would undermine it. | Bhutta & Crane 2014 |
| G | 79. Failure to tackle fraud may lead to more rather than less bureaucracy, as there will be calls for closer scrutiny and auditing by external agencies | Chubin 1985 |

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