UKRIO
RESEARCH INTEGRITY OFFICE

Promoting integrity and high ethical standards in research
Providing confidential, independent and expert support

Reporting research misconduct

When, how, and to whom

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RESEARCH INTEGRITY OFFICE

Introduction

This guide, alongside our short guide to misconduct investigations,[1] will support you in reporting suspected **research misconduct** and **questionable research practices (QRPs)** to institutions, publishers, and elsewhere, and to let you know what to expect from the process.

Research misconduct includes:[2]

- Using other people's ideas, intellectual property, or work without their permission and/or acknowledging their input (**plagiarism**);

- Breaching legal, ethical and professional requirements needed for research, for example those needed for human research participants, animals, or human organs or tissue used in research, or for the protection of the environment. An example of this includes proceeding with research without **ethical approval** or not obtaining **informed consent**;

- Proceeding with research without necessary **permissions and approvals** in place;

- Making up data or results, or other aspect of the research such as patient consent (**fabrication**);

- Manipulating and/or selecting research processes, materials, equipment, data etc. to present a false impression or outcome (**falsification**);

- **Misrepresenting** data or other information; and

- Failing to declare or appropriately manage **conflicts of interest**.

Examples of research misconduct from: What is research misconduct?[2]

Behavioural misconduct, such as harassment or bullying, may overlap with research misconduct but is not covered by this guidance, though we include brief guidance on reporting research misconduct alongside other misconduct.

When you report a research integrity concern, you will be known as a '**complainant**' or 'initiator', or sometimes a claimant or 'whistleblower'. Independent readers or consultants who uncover concerns can be informally known as 'sleuths'. This guide is for those who are, or are considering becoming, a complainant. Those who an allegation is about are known as the **respondent** and those to whom allegations are reported are known as the **recipient**.

For guidance on reporting a specific concern, please contact our free, impartial, expert, and confidential **Advisory Service**. If something we advise will get in the way of reporting, please disregard it and let us know to improve our guidance.

When to report

Reporting research misconduct should be done as soon as possible after you have confirmed that the concerns meet the definition of research misconduct used by the relevant organisations or national guidelines (in the UK, The Concordat to Support Research Integrity[3]). Report suspected research errors or research misconduct when you have reason to believe there has been a serious breach of good research practice or publication ethics. **Your institutional/employer's regulations may require reporting**.

The discovery of research misconduct often depends on good-faith whistleblowers who observe the wrongdoing and come forward to report it.

US National Academies[4].

Reporting concerns is expected by the UKRIO Code of Practice[5] (see excerpts below) and the Concordat expects researchers to *"handle potential instances of research misconduct in an appropriate manner; this includes reporting misconduct to employers, funders and professional, statutory and regulatory bodies as circumstances require"*. The European Code of Conduct for Research Integrity[6] notes that *"ignoring putative violations of research integrity by others or covering up inappropriate responses to misconduct or other violations by institutions"* is itself research misconduct.

3.17.5 Organisations should support those who raise concerns about the conduct of research in good faith and not penalise them. This support should be in accordance with the organisation's policy on raising concerns or "whistle blowing".

3.17.7 Researchers should know what constitutes misconduct in research and report any suspected misconduct through the relevant procedure of the organisation as soon as they become aware of it. They should recognise that good practice in research includes reporting concerns about the conduct of research and should cooperate with any investigation of misconduct in research when requested. Researchers should work with their institution to support those who raise concerns in good faith about the conduct of research and those who have been exonerated of suspected misconduct.

Excerpt from the UKRIO Code of Practice for Research[5].

Hesitation to report is understandable – whether to blow the whistle or not is often given as an example of 'moral distress'[7] – but not reporting real concerns harms research integrity[8]. Researchers may not wish to report for good reasons[9], and it can be hard for early-career researchers to 'break ranks'[10]. However, if you do not report suspicions and it becomes known you were aware of potential misconduct, **you risk being implicated in an investigation or seen as being complicit in a cover-up**. You may also allow continued harm, e.g., to research participants[11].

The alternative to reporting, i.e., to continue working with someone whom you suspect of research misconduct or in a research culture that allows such behaviour, should be unacceptable. Malek (2010) more fully discusses this[12].

This said, consider whether the concern is valid or whether it is a case of '**academic mobbing**', i.e., a collective, deliberate, and concerted effort to remove someone for reasons unrelated to misconduct, perhaps due to unconscious bias[13].

Formal vs informal reporting

Dispute resolution can be an alternative to formal reporting. Some questionable research practices (QRPs)[14] can be resolved by negotiation, maybe involving a neutral person, if you are not required to report. Future concerns can be prevented by changes to training and processes, which complainants can lead[15]. However, **power imbalances in research are often significant** and trying to informally resolve issues may be ineffective or impossible[16].

You might informally ask the authors of a thesis, book, or article about an issue and only suspect research misconduct once they have replied or you have seen the underlying data, e.g., due to unrealistic statistical patterns[17,18]. You will need to formally report at this point.

You may be unsure whether issues are deliberate or a mistake. However, this is for the institution to decide: **they must be made aware**. If the investigation finds no evidence for research misconduct, then an institution might instead opt to educate and retrain the respondent.

Preparing yourself

Before you report, **seek advice** from others. Consult someone who you trust, such as a local research integrity champion/lead, and seek assurance beforehand that they will keep what you share confidential. Discuss your concerns with them and decide on the right actions; informal approaches, as noted above, may be enough and a formal investigation might not be needed.

Stay calm and be patient because due process cannot always proceed quickly. Be ready to engage constructively by giving timely responses and sufficient detail. Being aggressive, terse, or insulting will be counterproductive. If you are personally affected by or invested in the concerns, this can result in a loss of perspective.

Considering the views of others involved in the process can help maintain a balanced approach.

Respect the integrity and confidentiality of the process, e.g., by not contacting the respondent, panel members, or other potential witnesses once a formal investigation begins.

Prepare for outcomes to be less than you hope for and for the process to be hard. You may tell the Named Person or Research Integrity Officer in your organisation in advance in case they are contacted due to your reporting, if you feel this will be helpful. Prepare for negative consequences: **Do you have a support structure in place?** Have you mentally prepared yourself for retaliation by the respondent or others?[18] Rarely, a report may be seen as 'frivolous, vexatious, or malicious', which should not affect those raising in good faith matters they believe to be true. Not everyone appreciates the reporting of concerns – some who do so publicly have been labelled 'vigilantes' or 'data thugs', which some wear as a badge of pride[17]. However, despite risks such as stigma or public or media attention[19], 80-90% of surveyed whistleblowers say they would blow the whistle again[11].

Consider getting legal advice[20]. Some people advise to not have lawyers in meetings because this may escalate costs and tensions[21].

If you are unsatisfied with the outcome, use an **appeal process** before you consider other steps[21]. However, be aware that formal appeals may not be available to complainants at some institutions and that within the UK only in Scotland is there formal oversight of universities (see the section on regulators, below). **You may have only one chance** to make your case unless new evidence arises.

Preparing your report

Focus on the evidence: how do you know there is an issue and what are the implications for the research process and any outputs? Prioritise factual statements, use a neutral tone, and avoid speculation and legal threats. Avoid **bolding**, exclamation marks, colour, underlining and ALLCAPS! These may distract you from clearly communicating your concerns and negatively affect the perception of your report.

Securely gather the evidence and back it up. Clearly label files and provide an index for the recipient if there are many files. Do not allow a file transfer service to expire before you have received confirmation of download.

Avoid insisting on a particular outcome. This prejudges an investigation, and the recipients may not have the power to provide that outcome, e.g., institutions may only recommend retraction because that decision is made by the editor and/or journal/publisher, and most UK research misconduct investigations make findings of fact and do not impose sanctions, which may follow in a disciplinary process.

Find the research misconduct and/or whistleblowing policies of the relevant organisations; remind recipients of their relevant policies, quote and link to the policies, and be aware when the correct processes are not followed.

If the policies are not available, ask for a copy when you report and suggest they be made public.

Remind recipients of the need for confidentiality. If you are not anonymous, say they need your permission to reveal your identity to anyone. Note: it can be impossible to remain anonymous, e.g., due to the type of evidence or an authorship dispute.

If there are additional allegations beyond research integrity and/or publication ethics, such as financial fraud or harassment, then you may note these but be aware that they are outside the remit of a research misconduct investigation and will be referred to another department, e.g., HR, legal, or finance, or another organisation.

How to report

Take care to **find the correct recipients** to avoid undue harm to respondents or alerting them to the report. For help with finding contacts or reporting concerns connected to UK research, ask the UKRIO Advisory Service. Individualise reports to each recipient, rather than copying everyone into a single email. Tell each recipient who else you have contacted. However, a single mass report may be appropriate for large-scale reporting, e.g., of suspected paper mills.

If there are serious issues of suspected research misconduct, make the institution aware before anyone else, e.g., the respondent or a publisher, so the institution may secure evidence[22].

> *Journals should be aware that in cases of suspected data fabrication or falsification, raising concerns with the authors first could enable researchers to destroy or alter evidence that might be important for an institutional investigation. Therefore, when journals have well-founded suspicions or evidence of falsification or fabrication they should consider informing the institution at the same time as, or before, they contact the author(s).*

Wager *et al.*, 2021; Cooperation & Liaison between Universities & Editors (CLUE) guidelines[22].

This was reinforced by the founders of Retraction Watch: *"Contacting authors before anyone else knows about potential issues in their work, only serves to give unethical scientists time to hide their tracks – and let's face it, those who are actually guilty of misconduct probably don't have any scruples about covering up the evidence of that misconduct. That will make it much more difficult for universities and oversight agencies to investigate cases properly"*[16].

It can be difficult to find the right contacts for non-UK organisations. If your institution has a research office, ask them to report the concerns on your behalf and find the right contacts. Responsiveness varies by country and you may need to be persistent in finding contacts[23].

Contact methods

Reporting suspected research misconduct is usually done by email and sometimes a web form. Written reports are preferred to a phone or video call so there is a clear record. If you report by a call or face-to-face, ask for minutes to be taken that you can check for accuracy.

The process may take a long time, so use an email address you will continue to have access to, e.g., if you change institution or employer[24]. To stay anonymous, use an account with an email provider such as Proton Mail or Private-Mail.

Reporting to institutions and publishers

Research institutions and publishers have different roles:

- Institutions are responsible for the research conducted using their facilities and resources or in their name by academics, staff, visiting researchers, students, or others. Their investigations aim to find whether research misconduct occurred, who was responsible, and what actions are needed to address the results of any misconduct. A disciplinary process may then decide on consequences, e.g., someone leaving the institution.
- Publishers are responsible for the integrity of the published record and decide whether they need to correct or retract articles, books, etc.

If a concern involves a published output, contact the institution and publisher at the same time unless the institution first needs to gather evidence, as noted above. **Publisher decisions can depend on institutional investigations, but not always**: they may be able to correct errors, post an Expression of Concern, and consider actions for ongoing submissions and respondents' roles as a reviewer or editor without or before a formal institutional finding.

Reporting to institutions

Most UK research institutions, especially universities, have a '**Named Person**' or main contact for research misconduct on their website, as required by the Concordat. First speak to this person. There should also be a **research integrity officer (RIO)** or a research governance, research administration, or research support office. Contacts for UKRIO's subscribing institutions are on our website.

If you are based in the institution to which you are reporting, you may speak confidentially and informally with a research integrity champion or a member of the research integrity team. If you are reporting elsewhere, ask your institution's Named Person or research integrity/governance team for advice and help with reporting.

Before you report, consider possible **conflicts of interest (COIs)** between the recipient and respondent, such as recent co-authorship or collaboration. If there is a COI, they should recuse themselves from discussing or investigating the complaint.

As well as or in place of the research misconduct procedure, UK institutions should have a whistleblowing process, also known as a **public interest disclosure** or **complaints policy**, particularly for staff and academics at an institution. The policies should explain which process should be followed. UKRIO has a template research misconduct investigation procedure that institutions may refer to.

If the correct contact is unclear, ask someone senior in the institution's administration who to contact about research misconduct, without giving details of the allegation. There may also be a general web form or email address to contact the institution; again, do not include details of alleged misconduct.

For editors reporting to institutions, see guidance from the Committee on Publication Ethics (COPE), CLUE, the US Enhancing Partnerships of Institutions and Journals Working Group, and the Council of Science Editors (CSE)[22,25,26,27].

Russell Group universities in the UK have agreed to follow guidelines on cooperating with other institutions on research misconduct investigations[28].

Reporting to publishers

Contact both the editors and publisher staff to ensure action is taken. Editors are often busy volunteer academics and may miss an email or not be aware of the correct process. Many publishers have **research integrity or publication ethics contacts** and a central reporting email or web form. Otherwise, someone in the position of Editorial Director, Executive Editor, Managing Editor, Publisher, Publishing Director, Chief Publishing Officer, or similar, will let you know the correct contact. **Only give details of the allegation to the right contact.** You may also contact the handling editor and the Editor-in-Chief.

Consider if the publisher or editor has a COI, e.g., the respondent owns or manages the publisher, is linked to someone who does, or has collaborated with the editor.

For institutions reporting to publishers, see guidance from COPE, CLUE, and the US-focused Enhancing Partnerships of Institutions and Journals Working Group[22,25,26]. COPE has guidance for journals sharing information with other journals[29] and a Facilitation and Integrity Subcommittee that can help when you have concerns about the process followed by a COPE member[30].

Dr Elisabeth Bik, a science integrity consultant, wrote a guide to reporting concerns to journals based on her experience, mainly in reporting biomedical image manipulation[24], and Dr Jennifer Byrne *et al*., 2021, wrote a case study of reporting concerns with suspected paper mills to journals[31].

Reporting to others

Occasionally, it may be necessary to report suspected research misconduct beyond an institution or a publisher, such as to funders, regulators, or the police.

Reporting to funders

Reporting research misconduct investigations to funders is usually the responsibility of the institutions who receive their grants. Some funders, in rare and exceptional cases, reserve the right to directly investigate suspected research misconduct or check that an institutional investigation followed the right process.

UK Research and Innovation (UKRI), the umbrella body for the UK research councils, has a research integrity page that lists the contacts for institutions to report formal research misconduct investigations to. Other UK funder reporting requirements are summarised by the University of Bristol's research governance team, **though it is important to check the guidelines of each funder for updates**.

Reporting to regulators

The UK government lists organisations (other than employers) to whom whistleblowing disclosures may be made. You may also contact your Member of Parliament (MP).

If suspected research misconduct may also be **professional misconduct**, the relevant regulators should be informed. Institutions who find serious research misconduct should refer researchers who are members of a regulated profession to the regulator[5]. Relevant bodies in the UK include the Animal and Plant Health Agency, Environment Agency, Food Standards Agency, General Dental Council, General Medical Council, General Pharmaceutical Council, Health and Care Professions Council, Law Societies of England and Wales, Northern Ireland, and Scotland, Nursing and Midwifery Council, and Royal College of Veterinary Surgeons, and, for social care, Northern Ireland Social Care Council, Scottish Social Services Council, Social Care Wales, and Social Work England. Other UK regulated professions and regulators are listed here.

Suspected misuse of human tissue should be reported to the HTA. Other regulators in the UK in the area of health include the Health Research Authority (HRA), Human Fertilisation and Embryology Authority (HFEA), Medicine and Healthcare products Regulatory Agency (MHRA), and Administration of Radioactive Substances Advisory Committee (ARSAC). Animal research concerns should be reported to the Home Office's Animals in Science Regulatory Unit (ASRU). For data handling concerns, contact the Information Commissioner's Office (ICO). The National Audit Office (NAO) regulates public spending. The Office for Students (OfS) in England regulates higher education, but not research. In Scotland, the Scottish Public Services Ombudsman (SPSO) may review complaints that have been considered by public bodies, including universities.

Reporting to research ethics committees

Suspected breaches in the research ethics of an ongoing human or animal study may be raised to the attention of the relevant committees, i.e., those who approved the research or are based at the institutions at which the research is being conducted, as well as being reported to the Named Person. Research participants should have received details on how to raise complaints when they gave written informed consent.

In the UK, for human research there are NHS and non-NHS research ethics committees (RECs), the latter for social care, defence, and other non-health related research.

Reporting to police and other authorities

Research misconduct is generally not criminalised[32,33], but some research misconduct may also be criminal, e.g., funding misuse, pharmaceutical data manipulation, mistreating research participants or other vulnerable people, or illegal materials. Some countries treat certain research misconduct as criminal.

If you believe the conduct of research was criminal, highlight this in any report and consider contacting the police or other organisations, e.g., Action Fraud.

Getting action taken

Corroboration of your complaint by others is valuable if you can obtain it, to "replace isolation with solidarity". This may be confirmation by others who also witnessed potential research misconduct or by trusted people whose advise you seek who can confirm your analysis in confidence[34]. Increasingly, sleuths are coordinating to avoid duplication of effort and be more systematic[35]. If a case has UK links, please seek advice from our Advisory Service, before or after reporting.

Consider disclosing your identity to the organisation(s) you are reporting to, even if you wish to be anonymous to the respondents. While optional, this can increase your credibility and help the recipients of your report because they can more easily check details with you and handle potential COIs[15]. For some institutions it is at their discretion whether to investigate anonymous reports, though COPE members are expected to investigate *"all allegations of plagiarism or other publication misconduct that have specific, detailed evidence to support the claim"*[36].

Depending on your relationship to the respondents and the research, you may be identified as the complainant even if the recipients keep your report and the details of the investigation confidential.

Public comments

It is risky to make public allegations of research misconduct because it **may result in defamation action against you** and unfair reputational damage to the respondent. However, it is reasonable to publicly state facts about apparent errors in a public output.

The rules of the post-publication commenting site PubPeer are useful[37,38]; they allow named and anonymous comments, but require that posts:

- Only discuss publicly verifiable information;
- Avoid accusations of misconduct;
- Avoid personal comments about respondents;
- Avoid speculation about motives.

Whether you post on PubPeer, social media, journal commenting, blogs, or speak to the media, these principles can help protect you and the respondents and increase the likelihood that your comments are taken seriously. Avoiding misconduct accusations is particularly important when relying on automated or semi-automated analyses such as tools to spot statistical anomalies[39].

Many journals publish Letters to the Editor, i.e., responses to published articles[40,41]. They may be editorially reviewed or peer reviewed and authors may have the chance to respond before publication. **Peer-reviewed outputs are protected from defamation claims** under the UK Defamation Act 2013, chapter 26, section 6 if statements are not made with malice. Following PubPeer's principles, above, can make it more likely that your letter will be published. If there are concerns with the article that may require correction or retraction, make clear to the editors and publishing staff that they must consider correcting the literature as well as whether to publish your letter.

Another option is to publish a peer-reviewed article that notes concerns such as risk of bias, as is done by the authors of Cochrane Systematic Reviews[42].

If serious issues are identified, or many issues are found with a particular researcher, **public comments are not enough** and the Named Person at the institution and/or the publisher must be informed.

Checklists

These summarise steps to take and questions to ask.

☑	**Rules:**
1.	Consider alternative explanations (especially that you may be wrong).
2.	In light of rule one, ask questions, do not make charges.
3.	Figure out what documentation supports your concerns and where it is.
4.	Separate your personal and professional concerns.
5.	Assess your goals.
6.	Seek advice and listen to it.
7.	Review your concerns with someone you trust.
8.	Listen to what that person tells you.
9.	Get a second opinion and take that seriously too.
10.	If you decide to initiate formal proceedings, seek strength in numbers.
11.	Find the right place to file charges; study the procedures.
12.	Report your concerns.
13.	Ask questions; keep notes.

From: Gunsalus, C.K. (2010). 'How to Blow the Whistle and Still Have a Career Afterwards. Or... How to Conduct Professional Disputes Professionally'[43].

- Questions to ask yourself when reporting research misconduct, by UKRIO (also included on the next page).

- Points to consider when reporting, in the appendix of Bonito *et al*., 2012[18].

- Checklists for concerns about an article:
  - REAPPRAISED[44].
  - TRACT, for randomised controlled trials[45].

Research misconduct reporting checklist

Questions to ask yourself when reporting potential research misconduct (in the UK)

		Question	Notes
1	☐	Does the concern meet the definition of research misconduct versus, e.g., data protection or behavioural misconduct? If yes, do any concerns besides research practice also need reporting in other ways?	
2	☐	Might the concern be reasonably explained as not due to research misconduct? If so, are there informal alternatives to formal reporting?	
3	☐	What are your goals and what outcomes do you want?	
4	☐	Have you sought advice, e.g., from UKRIO's Advisory Service, the whistleblower charity Protect, or your RIO or RI lead/champion?	
5	☐	What support do you have in place, e.g., union representation, legal advice, your supervisor, your MP, or your organisation's administration?	
6	☐	Is anyone else aware of the concern and willing to confirm your concerns and/or to report with you?	
7	☐	Do you have evidence, e.g., documents, emails, or data, which is backed up and ideally well-organised, with a timeline of events?	
8	☐	Do you know the research misconduct policies and processes of the relevant organisations?	
9	☐	Do you how long an investigation may take and what is expected of you during an investigation?	
10	☐	Do you know how to report to the relevant organisations?	
11	☐	Should you or your RIO inform other organisations now or later, e.g., publishers, regulators, the police, or oversight bodies?	
12	☐	If the concerns involve both an institution and a publisher, should you or your RIO contact the institution first so they may secure evidence?	
13	☐	Are there any relevant conflicts of interest, e.g., personal relationships or financial interests, that may affect an investigation, i.e., your own, the respondent's, or the investigators' COIs?	
14	☐	Do you wish to be anonymous? Will this be possible, might it reduce your credibility, and have you taken steps to ensure anonymity?	
15	☐	Do you agree to keep details of the process confidential?	
16	☐	Are you ready to keep notes and records during the process, to which you will have long-term access?	
17	☐	If you plan to make concerns public: 1) seek advice; 2) see PubPeer's principles – discuss only publicly verifiable facts, and avoid misconduct claims, personal comments, and speculation about motives.	

Advice and support for complainants

- UKRIO Advisory Service.
  https://ukrio.org/our-work/get-advice-from-ukrio/

- Protect, a whistleblower-support charity with an advice line.
  https://protect-advice.org.uk/

- National Guardian's Office for Freedom to Speak Up Guardians (mainly NHS).
  https://nationalguardian.org.uk/

- The All Party Parliamentary Group (APPG) on Whistleblowers.
  https://www.appgwhistleblowing.co.uk/

- Pro-bono legal advice from legal advice centres or law clinics is available from many UK universities, run by students and supervised by faculty.

Further reading

- Whistleblower protection/rights. (2021). *The Embassy of Good Science*.
  https://embassy.science/wiki/Theme:Fe62e07c-2e75-4a55-82e6-1908fa543b7a

- Larsen, K. (2020). Reporting Demystified: Tips for Effectively and Efficiently Reporting Misconduct. *Biophysical Society*. [Video, 49 minutes].
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US-focused advice

- How To Report Misconduct Allegations. (2022). *NIAID Funding News*.
  https://www.niaid.nih.gov/grants-contracts/how-report-misconduct-allegations

- Reporting Suspected Research Misconduct in Biomedical and Behavioral Research. (2008). *The Office of Research Integrity, U.S. Department of Health and Human Services*. https://ori.hhs.gov/reporting-suspected-research-misconduct-biomedical-and-behavioral-research

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A presentation based on this article by Baruch Fischoff is in the Research Integrity Webinar, 22 March 2021. *Academia Europaea Cardiff Knowledge Hub*. https://www.youtube.com/watch?v=hh70M301fPs&t=378s

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