

RESEARCH INTEGRITY: GUIDELINES FOR RESEARCH CONDUCT

1 Purpose

This policy sets out Cancer Research UK's (CRUK) position on how researcher communities and Host Institutions that receive CRUK funding are expected to maintain good research conduct and support research integrity.

CRUK is committed to its mission of bringing forward the day when all cancers are cured. CRUK expects the research it supports to be conducted according to the highest standards of research practice to ensure the integrity and reliability of the research and outputs.

CRUK is a Signatory to the Universities UK's [Concordat to Support Research Integrity \(the Concordat\)](#) and is committed to maintaining high standards of research practice within the research communities we support.

2 Scope

This policy applies to all CRUK-funded Host Institutions and individuals involved in research communities, including researchers, research support staff, research managers, administrators, and students.

In particular, we expect the CRUK Institutes (as defined in section 3) to be at the forefront of implementing the steps, standards and practices outlined in Section 4.

Host Institutions outside the UK are also expected to follow appropriate guidelines of a similar standard.

These Guidelines should be read in conjunction with:

- The Research Integrity section of CRUK's Grant Conditions.
- [CRUK's funding policies which form part of CRUK's Grant Conditions](#),

including on open science conflicts of interest for CRUK-funded researchers and commercial organisations, data sharing and management, dignity at work in research, environmental sustainability in research, recruitment of human participants in research, use of animals in research, use of generative AI tools in funding applications and sex in experimental design.

3 Definitions

Research integrity: CRUK, as a signatory to the *Concordat*, uses the definition and description of research integrity as outlined within that document with core elements of honesty, rigour, transparency and open communication, care and respect, and accountability.

Research misconduct: we use the *Concordat's* definition of research misconduct ([as amended](#)), and we expect Host Institutions we fund to do the same. The *Concordat* defines misconduct as “behaviours or actions that fall short of the standards of ethics, research and scholarship required to ensure that the integrity of research is upheld.” This includes fabrication, falsification, plagiarism or deception in performing or reviewing research, and in reporting research outputs. For example, failure to meet: legal, ethical and professional obligations, omitting relevant data, manipulating images, or misusing data by deliberately attempting to re-identify people from research data are all examples of research misconduct.

Research can fall short in terms of its integrity for a number of reasons, many of which do not reflect the intent of researchers. Research misconduct does not include honest differences in the design, execution or interpretation in evaluating research methods or results, or research of poor quality such as poor research design, weak procedures or analysis, inadequate documentation or record-keeping unless this encompasses the intention to deceive.

Host Institution: the university, institution or other organisation at which some or all of the research funded by a CRUK grant will be carried out.

Institute: the core-funded Cancer Research UK Institutes, namely the Cancer Research UK Scotland Institute, the Cancer Research UK Cambridge Institute, the Cancer Research UK Manchester Institute and the Francis Crick Institute.

4 Key Points

4.1 Responsibilities for good research conduct

4.1.1 Shared responsibilities of Host Institutions and individuals involved in CRUK-funded research

Principles of the Concordat to Support Research Integrity

As a Signatory to the *Concordat*, we expect staff, students, any associated personnel and Host Institutions involved in CRUK-funded research activity to abide by the principles set out the [Concordat \(as amended\)](#) and to work with due respect for one another within a supportive environment.

The Concordat [\(as amended\)](#) sets out five principles:

1. Upholding the highest standards of rigour and integrity in all aspects of research; both the research itself and any resulting publications.
2. Ensuring that research is conducted according to appropriate ethical, legal and professional frameworks, obligations and standards.
3. Supporting a research environment that is underpinned by a culture of integrity and based on good governance, best practice and support for the development of researchers.
4. Using transparent, timely, robust and fair processes to deal with allegations of research misconduct should they arise.
5. Working together to strengthen the integrity of research and to review progress regularly and openly.

Integration of research integrity principles into research culture

It is the responsibility of Host Institutions and all those involved in CRUK-funded research to maintain a culture that nurtures good practice and where honest and Research Integrity: Guidelines for Good Research Practice Page 3 of 19 Version 8, September 2024

ethical conduct of science is an expected norm. That is, individual actions must comply with the principles of honesty, rigour, transparency and open communication, care and respect, and accountability for a research environment in which individuals and organisations are empowered and enabled to own the research process.

A supportive and honest research culture should be a central tenet of the leadership's vision of success and permeate the behaviours and practices of individuals at every level

4.1.2 Responsibilities of individuals involved in CRUK-funded research

All those involved in CRUK-funded research have a responsibility to support the highest levels of research integrity. All staff, students and any associated personnel involved in a CRUK-funded research activity have a role to play in setting and maintaining standards and a positive culture, and reporting concerns or incidents if they do occur.

We expect CRUK grantholders to take a leadership role in developing and role-modelling a positive and learning culture within their research teams where learning and development are prioritised, where colleagues can freely discuss good research practice and ask questions, raise concerns or admit errors; and where poor or questionable research practices are addressed and corrected. We expect this leadership role to include having difficult conversations with staff at all levels of seniority, and supporting others in their teams to do likewise, where this is necessary to improve the culture within which the research is taking place.

Staff and student induction sessions are a good opportunity for institutions to instil the tenets of the Concordat. All new research staff, students and visiting researchers should be encouraged to attend induction sessions on research integrity and an introduction to the policies and procedures. This should include how to respond to, and report, concerns about poor research practice or research misconduct.

Effective people management is key to fostering a culture of research integrity and group leaders have a responsibility to mentor, supervise and support

members of their group. All group leaders should be given the opportunity to improve/refresh their management skills through formal and informal training (e.g. EMBO's Laboratory Management Course).

Mentoring of new group leaders by senior staff is to be encouraged; particular guidance should be provided when a junior group leader recruits lab members for the first time.

Researchers have a responsibility to raise concerns and report actual or attempted breaches of ethical, legal and professional frameworks, obligations and standards to the Host Institution. This should be done in line with published institutional guidance.

4.1.3 Responsibilities of Host Institutions involved in CRUK-funded research

Policies and procedures to promote good research practice

It is the Host Institutions responsibility to:

1. 1) hold the policies set out below, benchmarked against other reputable research organisations. These documents, along with a copy of the Concordat, should be held as a set and be clearly accessible/visible to all staff and students via links on websites or clearly signposted on shared drives. They should be given to all new starters and visiting researchers. Reminders should be sent periodically to all staff so that awareness of the policies, and where they can be found, remains high.
2. make sure there is an equivalent policy in place at any sub-grantee. If this is a problem, contact us for advice.
3. ensure any relevant privacy statement includes that sharing of personal data for the purposes set out in this policy may occur and that all employees and students associated with a CRUK application for funding under consideration or a CRUK grant have read and are aware of the potential for information sharing.

The key policy documents are:

Code of Good Practice – A document describing the values and behaviours that Research Integrity: Guidelines for Good Research Practice Page 5 of 19 Version 8, September 2024

are expected to be upheld by researchers when undertaking research at the institution. This should include a requirement that researchers conduct their work in accordance with ethical, legal and professional obligations and standards. It should outline, where relevant, the institution's policies and procedures for robust research design, safeguarding researchers and research participants, clinical governance, research involving animals, research records, data sharing and management, sharing research outputs, use of generative AI and open access.

Procedure to Investigate Allegations of Misconduct – A document detailing the various stages that would occur when investigating allegations of research misconduct. This does not need to be a separate document relating specifically to research misconduct, i.e. it can be a procedure that covers a wide range of issues. This should detail the circumstances in which information about the allegations would be shared with funders, including CRUK.

Whistleblowing procedure – A policy statement regarding the treatment of whistleblowers under applicable whistleblower protection legislation should be made available to all members of staff and students, outlining;

- that research misconduct is taken seriously
- the process to follow when raising concerns or making a research misconduct complaint
- that any student or member of staff with genuine concerns can raise them confidentially without fear of suffering any detriment
- equally, that disciplinary procedures are in place to deal with malicious allegations.

Role of the Research Integrity Officer (RIO)

Host Institutions must have a designated member of staff who has responsibility for matters of research integrity within the organisation. Their contact details should be publicly available on the Institution's website. Their responsibilities could include:

- Co-ordinating inductions for new starters and group leaders and regular refresher training
- Issuing regular updates to relevant policies
- Acting as a point of contact for anyone wanting to raise research

integrity-related queries and for the organisation's whistleblowing procedure

- Ensuring that policies relating to data archiving are adhered to
- Orchestrating internal peer review

Host Institutions must also have a senior staff member responsible for overseeing research integrity. Their contact details should also be publicly available on the Institution's website.

Training, reward and recognition

Institutions must provide training to equip researchers with the skills, knowledge and resources to conduct science that is high-quality, ethical and valuable.

Formal workshops or training courses may provide further guidance on practical measures to promote research integrity, such as responsible authorship and publication, avoiding plagiarism, experimental design, reproducibility, data management, appropriate use of statistical tests, record keeping, and responsible image processing.

Institutions should recognise and reward researchers for behaviour that supports research integrity and a positive research culture. These could include:

- providing support for collaborations
- undertaking and recognising peer review and advisory board activities
- demonstrating commitment to diversity and inclusion.

You may find the [Hong Kong Principles for research assessment](#) a useful reference.

Data archiving

Host Institutions should establish clear, consistent data retention policies applicable to, and covering all data generated by, the research undertaken at the institution. All data generated should be subject to these policies.

It is advisable, and where resource allows, that any raw data and related material (and in particular data relating to published research) is retained according to standard guidance and for a minimum of 10 years after the study has been completed or, in the case of population health and clinical data, a minimum of 20

years. In addition, if image processing is used, a copy of the original image file as well as the manipulated image should be retained. Research based on clinical samples or relating to public health might require storage for longer to allow for long-term follow-up to occur.

Continuous improvement

Cancer Research UK believes that the culture of research integrity should be underpinned by a philosophy of continual improvement. Given the constantly evolving world of research, Host Institutions should periodically review processes and procedures to ensure they remain fit for purpose. In addition, Host Institutions should seek opportunities to share their knowledge to foster the development and the dissemination of best practice.

Publish annual research integrity statement

As required by the Concordat, Host Institutions must produce a short annual statement on Research Integrity. This must be presented to their governing body and subsequently made publicly available e.g. on the institution's website. The annual statement should include requirements set out in the Concordat (as amended).

4.2 Responsibilities of the Host Institution to investigate unacceptable research conduct

It is the responsibility of the Host Institution to:

1. Identify a member of staff to act as first point of contact for anyone wanting to raise issues relating to research misconduct at the institution.
2. Carry out an impartial, fair and timely investigation of all allegations of research misconduct made against its staff and students. The Host Institution must:
 - protect the rights of all employees and students involved;
 - have processes and procedures in place to review and manage the risks associated with the continued involvement of an individual in a CRUK grant application or CRUK-related activity while an allegation of research misconduct by that individual is investigated.
 - take appropriate action.

As per CRUK's Grant Conditions, the Host Institution must have formal written procedures for the handling of allegations of research misconduct made against its staff and students. CRUK recommends that those procedures include:

- A definition of research misconduct that includes or is consistent with the Concordat.
- Guidance as to who can make an allegation, how to do so and to whom to send it.
- The timescales within which allegations will be dealt.
- The support to be provided to all parties involved.
- The use of independent external members of formal investigation panels and ensuring that the investigation is independent and avoids any potential conflicts of interest.
- The fact that CRUK must be notified of investigations at the earliest opportunity.
- The possible sanctions if the allegation is upheld.
- How an appeal can be made.
- Procedures for record keeping, including the fact that contemporaneous records of all allegations and investigations must be kept, who is responsible for keeping them and how those records should be kept.
- Provisions to apply to visiting researchers (including students or staff).

The procedures should be developed and reviewed in light of, and be substantially consistent with, the Concordat and the UK Research Integrity Office's recommended procedure for investigation (<http://ukrio.org/publications/misconduct-investigation-procedure/>).

4.3 Responsibilities of the Host Institution to report allegations to CRUK

It is the responsibility of the Host Institution to:

- 1) Inform CRUK's Head of Research Operations, Amy Bradburn via dignityinresearch@cancer.org.uk, in confidence, when a decision is made to formally investigate an allegation of research misconduct.

This applies to any employee or student at the Host Institution who is associated with:

- an application for funding under consideration (see 'grant application stage' section below)
- a CRUK grant.

The Host Institution must tell CRUK as soon as possible and within one month of deciding to undertake a formal investigation (and must be reported at this stage at the latest) unless the case is deemed high-risk or an allegation is demonstrably irrefutable at an earlier stage, in which case CRUK should be informed immediately.

The following information must be provided (in confidence if the information is not in the public domain):

- the name of the person against whom a full investigation has started into an allegation of research misconduct;
- the person's connection to CRUK (e.g. relevant current or past CRUK grant reference number(s))
- a brief factual statement about the nature/type of the allegation
- details of any publications or other research outputs affected
- the start date of the investigation and expected/actual investigation completion date.

2) keep CRUK informed during the process of investigation into allegations of research misconduct. We may choose to send a representative to observe any formal inquiry. CRUK will monitor progress of an investigation and may request updates after the expected investigation completion date.

Investigations should conclude within one year of receiving the allegation

3) Contact CRUK's Head of Research Operations, Amy Bradburn via dignityinresearch@cancer.org.uk, in confidence again when the investigation has been completed to inform CRUK of the outcome of the investigation as soon as it is known and to provide CRUK with a copy of the full, final investigation report and any updates following any subsequent appeal.

This should confirm:

- If the allegation was upheld;
- the findings of the investigation;
- the nature and duration of any sanctions being imposed.

CRUK expects institutions to complete the disciplinary procedure such that a formal finding can be reached, disciplinary procedures are applied, and findings are documented.

At grant application stage: by submitting a grant application to CRUK, the Host Institution and Lead Applicant(s) confirm that, to the best of their knowledge and except as has been notified to CRUK in writing, there are no research misconduct allegations currently under investigation involving the Lead Applicant(s) or any other person named on the Application, nor has any allegation of research misconduct in respect of any such person been upheld in the previous five (5) years. CRUK reserves the right to reject the grant application or require that the relevant individual(s) be removed from it.

4.4 Why CRUK asks to be informed and what we do with this information

While CRUK recognises that the requested disclosures under this policy may include personal data, we consider we have a legitimate interest in handling this data.

This requires CRUK to undertake a balancing test to ensure that there are no unwarranted adverse effects on the individual.

UK data protection legislation does not prevent the sharing of this data. Whilst CRUK recognise that often information is confidential in nature due to the employment relationship, CRUK maintains the quality of confidence where allegations are under investigation and there is no immediate risk of harm to others.

During the application stage, CRUK needs to be aware of upheld allegations or those currently under investigation, so that we can make responsible funding decisions. Informing us about an investigation will not affect how we process or

review an application, but we may, for example, delay issuing an award until an investigation is completed. This is to:

- reduce risk to the project and/or
- reduce the impact on other people who would be involved in the project, including newly recruited postdoctoral researchers or support staff.

After an award has been made, the Host Institution must tell us when a formal investigation into research misconduct has been started. This is so that CRUK can:

- monitor that complaints are being dealt with appropriately and in a timely manner;
- make sure that grantholders receive the support they need, and;
- be aware of the potential impact on CRUK-funded activities and the steps being taken to manage that impact;
- ensure CRUK funds are spent according to purpose, e.g., in accordance with charity law and use of public donations

The information you provide at any point should not normally include any:

- sensitive personal information (such as special category personal data, as defined in UK Data Protection Law) or information relating to criminal offences or convictions; (In some circumstances such information may be pertinent to the investigation. Should an organisation feel that they did want to provide special category data, they should ensure that this meets the requirements of Article 9 of GDPR, for example with the consent of the data subject.)
- personal details about other people, e.g. the person making the claim.

Any information you send to us will be:

- handled in confidence and in accordance with data protection law requirements;
- stored in a secure, restricted-access location, with access restricted to the two members of staff involved in the management of these cases:
 - Head of Research Operations
 - Director of Research Operations & Communications

- communicated only to other CRUK staff on a need-to-know, restricted-access basis only, where necessary, to pursue our legitimate interests as a funder. This includes making sure that:
 - we can access legal advice;
 - grantholders get the support they need from CRUK;
 - the outcomes of CRUK-funded grant activities are not at risk;
 - we are able to monitor the number of outstanding cases. CRUK's Scientific Executive Board and Research Committee review anonymised data relating to outstanding cases on a periodic basis.
- not communicated to expert reviewers;
- kept by CRUK in line with our retention policy, reviewed regularly to assess whether it can be removed, and for no longer than we need it for our legitimate purposes. Any allegations that are not upheld will be stored for two years after the outcome, the remainder will be stored for six years after the outcome, or the point at which any sanction ends whichever is later;
- communicated to other organisations only where the grant is co-funded by them;
- reported at an anonymised, aggregated data level in CRUK's annual statement on research integrity, publicly available on the [CRUK website](#), which is required under the Concordat to Support Research Integrity.

CRUK may convene a Research Conduct Review Panel – comprising designated senior members of CRUK's governance boards – to review the outcome of an investigation of research misconduct and take a decision on what potential, appropriate sanctions CRUK should then take as a research funder (see section 4.5). Information shared with the Panel will be highly restricted, accessible only to those designated senior individuals.

All personal data provided will be managed in accordance with CRUK's Information Security & Data Protection Policy. Information on how to exercise Data Subject Rights are made available via the [CRUK Privacy Statement](#).

4.5 Sanctions

Research misconduct as defined in this policy covers a broad range of activity of varying severity, therefore any sanctions taken by CRUK in consequence will be on a case-by-case basis.

If the Host Institution or CRUK determines that the allegation of research misconduct is substantiated, we will consider our own independent, appropriate sanctions related to CRUK-funded research activities. Sanctions may vary in length, depending on the seriousness of the case and any remedial action already in place. Reasonable steps should be taken by the Host Institution to resolve any issues found during the investigation.

Any CRUK specific sanctions will be independent of any set by the organisation and may include:

- send a letter of concern
- removal from the application or grant in question
- withdrawal of current funding. CRUK will work with the Host Institution to minimise the impact on staff working on the affected grant(s), which may include transferring the grant to another suitable investigator to allow the work to be completed.
- Temporary or permanent restriction from future grant applications (or specific types of grant applications)
- requiring the withdrawal or correction of pending or published abstracts, papers or monographs produced by the research that has been under investigation
- requiring training and/or the monitoring of future work
- repayment of any grant
- take any further sanctions at its own discretion.

Where allegations of research misconduct are upheld, we expect Host Institutions to implement appropriate disciplinary procedures.

CRUK may apply sanctions against a CRUK-funded Host Institution if CRUK believes:

- the Host Institution has failed to respond to a research misconduct complaint promptly and objectively;
- the Host Institution has failed to keep CRUK informed;
- there has been institutional-level failure to complete disciplinary procedures;
- there has been a serious Institutional-level failure to effectively ensure appropriate good research conduct standards are observed.

Sanctions we apply against Host Institutions may include:

- ongoing monitoring of the Host Institution's policies and practices;
- not accepting new grant applications from that Host Institution for a period of time;
- suspending funding to the Host Institution in extreme cases;
- taking any further sanctions at its own discretion.

4.6 How CRUK handles allegations

Allegations of research misconduct should always be reported to the employing host institutions of the person against whom the allegation is being made. It is the organisation's responsibility to investigate, not CRUK's.

If an allegation is made directly to a member of CRUK staff or via email to Dignityinresearch@cancer.org.uk rather than to the employing institution:

- a senior CRUK staff member will first discuss the circumstances with the informant.
- CRUK will either encourage the informant to report the allegation at their Host Institution through the appropriate channels or tell an appropriate individual at the Host Institution if the individual is unwilling or unable to report the allegation directly to the Host Institution.

We will respect an informant's wish to remain anonymous, unless:

- we have a legal obligation to reveal their identity
- it is impossible to maintain anonymity to conduct an investigation.

We will tell the informant if we need to reveal their identity.

The employing Host Institution is then responsible for following its own allegation procedures.

We will reserve any judgement about an allegation until the investigation is complete. We will only provide information to our staff or external advisors on a need-to-know basis.

4.7 CRUK's role in any investigation

As stated above, it is the Host Institution's responsibility to investigate allegations of research misconduct, and this is our preferred course of action.

However, CRUK may:

- ask for information about a Host Institution's processes and how they are effectively implemented;
- check that a Host Institution and any sub-grantee have a policy and are following it;
- ask for a copy of the full, final investigation report.

This may be done as part of CRUK's standard funding assurance process, grants management audits or as part of the annual review process in the case of Host Institutions holding core-funding from CRUK.

If an investigation has been completed and an individual has concerns about the process, CRUK will ask the Host Institution to confirm that it has adhered to its published policy. We are not able to challenge the outcome of the investigation.

Formal allegations, reports of allegations or complaints about process, should be reported to CRUK, as outlined in this policy, and within ten years of the alleged misconduct having taken place.

Where we exercise our right to see the above information, we expect organisations to be able to share it. We strongly discourage the inappropriate use of non-

disclosure agreements that might prevent organisations from sharing this information with us.

In exceptional cases, CRUK also reserves the right for it, or its agents, to investigate any aspect of research misconduct itself that concern CRUK-funded researchers (for example, where our reputation is at risk or we are dissatisfied with the investigation undertaken by the Host Institution).

Any investigations will only be undertaken following consultation with the appropriate representative(s) of the Host Institution.

5 Support & Advice

For any queries about this policy please contact: dignityinresearch@cancer.org.uk.

- Dan Burkwood, Director of Research Operations and Communications is the senior member of staff who oversees research integrity at CRUK.
- Amy Bradburn, Head of Research Operations is the first point of contact for CRUK on research integrity matters.

6 Related documents

For more information, please see the following web pages:

- Cancer Research UK's Grant Conditions
<http://science.cancerresearchuk.org/funding/terms-conditions-and-policies/index.htm>

- Concordat to Support Research Integrity
<https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/the-concordat-for-research-integrity.aspx>
- Code of Practice for Research: Promoting Good Practice and Preventing Misconduct (UKRIO) <http://www.ukrio.org/what-we-do/code-of-practice-for-research>
- UK Research Integrity Office's recommended procedure for investigation: <http://ukrio.org/publications/misconduct-investigation-procedure/>
- Integrity in Practice Toolkit (UKRIO & Royal Society) <http://ukrio.org/integrity-in-practice-toolkit/>

Policy sponsor	Dr Iain Foulkes, Executive Director of Research & Innovation, CEO Cancer Research Horizons
Policy owner	Dan Burkwood, Director of Research Operations & Communications
Subject Matter Experts (SME)	Amy Bradburn. Head of Research Operations
Executive Board or Council approval required?	Scientific Executive Board approval required
Date of last review	9 September 2024
Next review due	September 2026
Superseded documents	Version 7

Summary of Changes

Key changes to the policy should be recorded below:

Version	Date	Author	Approved	Summary of Changes
V8	09/09/2024	Sue Russell, Senior Policy Manager	Scientific Executive Board	<ul style="list-style-type: none"> Section 4.1: Clarify responsibilities for institutions or individuals involved in research. Added section on institutional reward and recognition.

				<ul style="list-style-type: none"> • Section 4.2 New requirement for institutions to manage risks during investigations. • Section 4.3: Institutions must report within one month of formal investigation decision; CRUK requirement for grant application stage from Grant Conditions. • Section 4.4 Clarify why we ask to be informed; what we do with information. • Section 4.5 Clarify any potential CRUK sanctions are independent; we may take further actions at our discretion. • Section 4.6 Outline process if researchers contact CRUK directly. • Section 4.7 Added CRUK may ask for copy of full, final investigation report.
V7	13/10/ 2021	Sue Russell, Senior Policy Manager	Scientific Executive Board	<ul style="list-style-type: none"> • Formatted into new policy version; • Section 4.1: expanding what good research conduct and culture is; • Section 4.3: requiring institutions to report to CRUK when decision is taken to formally investigate an individual against whom an allegation has been made; • Section 4.3: requiring institutions to report name of individual against whom an investigation has been opened; • Section 4.5: sanctions CRUK may take against a Host Institution; • Section 4.6: expanding information on CRUK's right to investigate.