

Science, Technology, Engineering & Mathematics (STEM):

Research Misconduct

For Trainers

Why case studies?

A core function of the UK Research Integrity Office is to provide independent, expert and confidential advice on the conduct of research, from promoting good practice to addressing allegations of misconduct.

Each request for assistance received by UKRIO increases our body of knowledge. These 'lessons learned' not only inform our response to subsequent enquiries but also underpin our other activities, especially UKRIO's education and training work.

We have found that illustrative case studies are an excellent way to raise awareness of research integrity and to illustrate the complexities and 'grey areas' which can occur.

Case studies are not literal accounts of any particular enquiry to UKRIO. Instead, they are scenarios, based on real-life situations, which illustrate recurring or notable issues and problems which have been brought to our attention.

Case studies are suitable for any audience but may be of particular interest to managers, advisors and researchers involved in responding to allegations of research misconduct. While some case studies may mention a particular discipline, they contain themes that are relevant across all subjects.

Please note that this case study is fictitious. Any similarity to actual persons, organisations or events is coincidental.

Case study 4

You are the person in your university responsible for receiving allegations of research misconduct and any other concerns about research conducted under the auspices of the university.

You are approached by the Chair of the Postgraduate Research Committee for the Department of Chemistry about a *research student* based in one of the laboratories, and whose studentship was funded by a large charitable organisation.

The student recently submitted their thesis, and before the oral examination, one of the nominated examiners noticed some discrepancies in the results of an experiment that was undertaken and written up in the thesis. She raised it with the supervisor, who undertook some quiet investigative work and ascertained that it was 'very likely' that the results had been altered. The supervisor raised the concerns with the student at a one-to-one meeting and reported that the student broke down in tears and *admitted that they had changed the results*.

However, when an additional meeting was held to discuss this further, the student denied all wrongdoing, and indicated that they had been *coerced into admitting it*, had received inadequate supervision throughout their degree and that the supervisor was now *'covering his back'*.

The oral examination is due to take place within two weeks. The student already has a job working in the Research and Development section of a borough council.



Please discuss and decide:

How do you proceed in these circumstances:

- a. If your research misconduct procedure excludes research students?
- b. If your research misconduct procedure includes research students?

What other issues does this raise?

Case study 4 resolution

Trainer tips

You should see your role as guiding the discussions. The resolution below is intended as a starting point for debate and reflection, drawing on the major themes of the case study. Certain approaches are proposed but discussion of the case may well suggest others – there is often no single ‘right’ answer.

You can also alter details during the discussion to explore the trainees’ understanding of good practice.

1 How do you proceed if your research misconduct procedure excludes or includes research students?

If your university’s research misconduct procedure *excludes* research students, then you would investigate the allegation under the examination or academic regulations for research students. If your research misconduct procedure does *include* research students, then you need to decide whether to use it or find other means to conduct the investigation.

One possible threshold is that if an allegation is made *after* the student has submitted their thesis or completed their viva, then the **examination regulations should be used**. If an allegation comes to light *before* then, **the research misconduct procedure would be initiated**. However, there is no universally agreed approach; for example, some institutions always use their exam regulations to investigate allegations involving research students.

In UKRIO’s experience, examination regulations are generally well-suited to investigate allegations of plagiarism, fabrication, and falsification. However, it can be challenging to use them to investigate issues concerning falsification/fabrication, participants or patients, other ethical concerns, conflicts of interest and authorship disputes. Issues can fall through the gaps if exam regulations or student disciplinary procedures are not geared up to deal with complex cases.

The status of those involved can also complicate matters: what if a member of staff is involved in the allegation or if the student concerned is also an employee of the university? If the allegation involves issues such as these or is complex/serious, then the research misconduct procedure may well be the best process to use.

Regardless, it is important to remember that the objective of your investigation is not just to determine what has happened and act against anyone who has committed misconduct. Other aims – which are just as important, if not more so – include *safeguarding* research participants and patients, *correcting the record* of research and correcting wider or systemic issues.

2 What other issues does this raise?

- This scenario also illustrates the importance of either having more than one person involved in any meetings or for notes to be taken. The supervisor in this scenario claims that the research student admitted to him in a one-to-one meeting that they had committed the research misconduct; however, the student strenuously denies the supervisor's account.

It can make allegations significantly more difficult to investigate when it is one person's word against another's. This may seem obvious, but, particularly in a supervisor-student situation, if researchers are used to having one-to-one meetings and have built up a relationship, then it may well not occur to them that this might be an issue, particularly in the heat of the moment when something has arisen.

Equally, a student or other respondent in one-to-one meeting can feel intimidated and under pressure to admit to an alleged offence. To protect all involved, **it is important that involved parties are accompanied to meetings and that notes are taken.**

- The studentship was funded by a large charity. You should determine what your contractual and other obligations are to the charity when an allegation concerning one of their studentships has been made. For example, you may be required to inform it when an allegation has been received or if the matter proceeds to a formal stage of the investigation, and to provide it with an appropriate report on the outcome.

Some funders, particularly smaller organisations, may not have thought to set out contractual requirements for notifying them about allegations of research misconduct. If this is the case, given their role as a funder you should consider making appropriate disclosures, in confidence, regardless.

- The student has secured a job working in the Research and Development section of a borough council. What if the allegation of misconduct is upheld and they were given the job on the condition that they would be awarded their PhD? Would it be acceptable for you to inform the council of the outcome of the investigation? Does it make a difference if the council has requested a reference from the university or not?



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

© Nicola Sainsbury & UKRIO 2023

This article is distributed under the terms of the [Creative Commons Attribution-Non-Commercial-No Derivatives License](#), which allows re-users to copy and distribute the material in any medium or format in unadapted form only, for non-commercial purposes only, and only so long as attribution is given to the creator.