

ANALYSIS

Coping with scientific misconduct

Research misconduct can have serious implications, but getting it investigated is not always straightforward. **Elizabeth Wager** examines some of the difficulties

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Editors have a duty to act if they suspect misconduct by an author.¹ However, since they are not equipped to investigate misconduct allegations or impose punishment they must rely on the author's institution.² The Committee on Publication Ethics' (COPE) code of conduct states that "Editors should make all reasonable efforts to ensure that a proper investigation is conducted." However, the code also hints at the difficulties editors may face, stating: "if this does not happen, editors should make all reasonable attempts to persist in obtaining a resolution to the problem. This is an onerous but important duty."¹ I have used the COPE database of cases (box) to show the difficulties editors may face when they try to alert institutions to possible cases of research or publication misconduct.

Cases presented to COPE cannot be used to estimate the frequency of problems. Members probably bring only their most troublesome cases to the COPE forum, and so the database is likely to over-represent cases where the response from institutions has been unsatisfactory. Furthermore, COPE hears only the editors' side of the story.

COPE cases

I identified 155 cases discussed by COPE from January 2007 to June 2011, 24 of which included details about editors attempting to contact institutions and the outcome of this interaction (table 1). In half of the 24 cases editors came across problems, which I have categorised below.

Inability to identify or contact an institution

Three cases described editors being unable to identify an institution or an appropriate person to contact. In one case (COPE case No 10-06) relating to nearly 100 articles by a single author whose results appeared "too good to be true," the author was unresponsive and the editor could not find the stated institution. In another case (08-03) the editor had serious concerns about the conduct of a clinical study, and the author's explanations were unsatisfactory. However, the editor saw no point in contacting the institution since the corresponding author was the clinical director and his wife was the administrative director. In a similar case (09-01) an editor of a mathematics journal was alerted to apparent plagiarism of a complete article

but discovered that the senior author was the university president. He therefore contacted the ambassador of the author's country, the country's president, and the president of the national mathematical society but received no response.

These examples show that it can be difficult for editors to know whom to contact. Wider adoption of the American system, where each institution has a research integrity officer, would be helpful.

Institution does not respond to editor

In four cases the authors' institution did not reply, often despite evidence of serious misconduct and repeated communications from the editor. In one case of suspected serial plagiarism (08-31) the author submitted a case study that was "an almost word-for-word copy of a paper previously published." The editor then discovered two further case reports from this author (which had been accepted but not yet published) that also seemed to be plagiarised. However, the author's hospital did not respond.

In another of the four cases (09-11), an editor had concerns about the ethics of a trial of a homoeopathic treatment for HIV/AIDS. The editor was concerned that patients may have been denied effective antiretroviral treatment and wanted clarification about how patient consent was obtained. The authors claimed the study had been approved by an ethics committee and by their country's ministry of health but that this approval was verbal, so they could not supply documentation. The editor contacted the author's institution, the ethics committee, and the ministry of health but received no response.

Failure to investigate misconduct allegations

When editors inform an institution about suspicions of misconduct, they expect the institution to respond appropriately and investigate the allegations. However, this does not always occur. In one case of duplicate publication (07-09), the institution simply forwarded a letter from the accused authors stating that they saw no problem since their (duplicate) papers had been peer reviewed by respected journals. In a case of disputed authorship (09-02), the authors' institutions did nothing to resolve the dispute, and the authors threatened the journal with legal action.

Committee on Publication Ethics (COPE)

- COPE was founded in 1997 as a "self help" group for journal editors faced with ethical problems
- It has over 6000 members worldwide working in all disciplines
- As well as providing advice on publication ethics to editors and publishers, COPE hears complaints from members of the public who believe that a member has not followed its code of conduct
- COPE holds a quarterly forum at which members can discuss anonymised cases. The cases, advice, and follow-up information (if provided by members) are entered into a database (available at www.publicationethics.org)

Similar problems have been reported elsewhere. In a case discussed by COPE before 2007, an institution initially stated that it could not investigate unless the journal provided the funds.³ The editor persisted, and it turned out that the author had already been suspended for other misdemeanours. In another case, pursued by the *BMJ* for over 10 years, a Canadian university refused to investigate because the author no longer worked there.⁴

Failure to investigate misconduct properly

Investigations into misconduct should be both thorough and fair to all parties. Editors may be reluctant to contact an institution if they fear that those accused of misconduct will not get a fair hearing. The recent COPE cases include one example, when an editor contacted an institution in a case of disputed authorship (08-23). The dean responded four days later, without having contacted the complainant (who felt he deserved authorship) or allowing his position to be heard. The editor requested a full, independent investigation from the institute but got no response.

Hey and Chalmers describe a misconduct investigation at a British hospital that led to two consultants being suspended but "was conducted in a politically charged atmosphere and somewhat hastily."⁵ A second investigation by the hospital "ultimately found that there had been no case for disciplinary action, let alone for a two-year suspension."

Protracted investigations

The COPE database, which allows for only limited follow-up, does not include examples of lengthy investigations, but descriptions have been published elsewhere. Catano and Turk describe a case in which an "eminent researcher" was accused of misconduct in clinical trials that "threatened the safety of patients."⁶ The hospital used emergency procedures that "effectively shut down [the doctor's] research and her laboratory." Although these measures should have been reviewed within two weeks (according to the institution's by-laws), it took almost four years for the institution to conclude that the measures were inappropriate, by which time the doctor's research was a "shambles."⁶

Daroff describes a case of alleged data falsification by a US researcher that took nine years to resolve.⁷ And in another case from the US that ran from 1997 to 2003,⁸ Spece and Bernstein note that the investigation cost the university over \$1m and that the researcher "was left bankrupt, emotionally exhausted, and apparently unable to pursue relief within the federal bureaucracy."

Failure to communicate investigation results to affected journals

In an ideal world, journal editors would trust the outcome of institutional investigations, but it is important that these outcomes are clearly communicated to the journal and, in some circumstances, editors may require details of an investigation before they decide on the appropriate response.

In a case where the results were "almost too good to be true" and the editor had received unsatisfactory explanations from the author (07-29), the institution told the journal that the investigation merely confirmed that the author cared for many patients with the described condition, some of whom had affirmed that the intervention was beneficial. It did not seem to have examined the statistical anomalies. The editor, unsatisfied by the investigation, asked for a copy of the report but the institution refused to supply it.

Journals' failure to respond to misconduct findings

Sometimes journals do not respond appropriately to information from institutions rather than the other way round. Despite a clear ruling from the Office of Research Integrity about data fabrication in 10 articles by Eric Poehlman in March 2005, only five had been retracted by November 2005,⁹ and only six when I checked in July 2011.

Next steps

Cases presented to COPE, and anecdotal evidence from other sources, indicate that interactions between journal editors and academic institutions in cases of suspected research misconduct are not always satisfactory. This small sample cannot show the proportion of unsatisfactory interactions (and the COPE database probably includes a disproportionate number of difficult cases), but in the serious matter of research integrity, any failings are disappointing. If suspected misconduct is not investigated, unreliable findings may remain in the literature and fraudulent researchers may go unchecked. If misconduct investigations are improperly handled, innocent researchers may suffer, careers may be ruined, and resources wasted.

Institutions should recognise the need to work with editors to ensure that allegations are investigated and that flawed publications are corrected or retracted. The COPE guidelines note that, "The main purpose of retractions is to correct the literature and ensure its integrity rather than to punish authors who misbehave."¹⁰ Employers should take responsibility for disciplining errant researchers, while editors should take responsibility for what is published in their journals. If editors experience difficulties getting an institution to investigate or believe that the investigation is not, or would not be, fair, COPE recommends they publish an expression of concern.¹⁰

Universities should consider properly handled misconduct investigations a sign of good governance rather than an embarrassment. However, some institutions seem reluctant to share the results of investigations or may even try to avoid carrying out an investigation for fear of their reputations. Institutions therefore have an inherent conflict of interest in investigating misconduct, and this needs to be counterbalanced or mitigated as far as possible. Lack of transparency leads to loss of trust and can prevent the proper responses to misconduct (such as retractions of published papers). However, cultures of secrecy cannot be changed quickly, and trust cannot be developed overnight. One small step forward would be for

Difficulties caused by ambiguous information

A scientist raised concerns about the reliability of data in two publications and brought it to COPE because he felt the journals had not responded appropriately to a case of suspected misconduct.

The university (in Western Europe) had investigated the case and issued a press release calling on one of the authors to withdraw the study because there was a "suspicion of scientific misconduct" by a member of the research team (who had since resigned) but not specifying which publications were affected.

A later press release from the university said that its investigation had been criticised because of the competing interests of a panel member, who was then replaced. The university then forwarded a letter, signed by some of the other authors, to one of the journals requesting retraction. However, the authors later withdrew their retraction and informed the journal that, despite the university investigation, they were convinced that their paper was based on reliable data that were obtained at a different period from that in which misconduct was alleged to have occurred. The university failed to clarify when the misconduct had occurred and therefore which publications might be affected.

This case involved considerable work for the journal editors and difficult decisions since the university did not cooperate with the journals or answer the editors' questions. One journal published an expression of concern but the other did not, hence the complaint to COPE. The journals had to decide whether the university investigation had been properly conducted and then to try to determine what the investigation actually found. The university's press releases were ambiguously worded and did not identify when the misconduct had occurred or which publications were affected. Furthermore, the investigation's findings were disputed by the authors.

Note: this case is not included on the COPE forum database because it was handled as a complaint against two COPE member journals

editors and institutions to work together to define their responsibilities and describe good practice. COPE is currently discussing such guidance and would welcome input, especially from those responsible for research integrity at institutions.

Contributors and sources: EW runs training courses for researchers, editors, writers, and publishers, some of which include publication ethics. The article is based on a review of the COPE database and a non-systematic literature review. EW is the sole contributor.

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Table

Table 1 | Outcomes of cases in COPE database where editors have tried to contact institutions, January 2007-June 2011

	No of cases (n=24)
Helpful or appropriate response	12
No response	4
Unhelpful or inappropriate response	4
No institution to contact	3
Outcome not yet available	1