## **Misconduct of Others: Prevention Techniques for Researchers**

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Few people can distinguish between the smell of day-old fish and the odor of the paper in which it was wrapped. That's just how it is with scientific misconduct. The misconduct of those working with you may become yours. In the worst case, your lab is shut for the investigation, your publications are retracted, and your name becomes suspect. Even if *you* reported the suspected misconduct, and the investigation is fair, the accuser and the accused may become intertwined as the investigation proceeds. All too often, the reporter and the reported blame each other, making the investigation protracted and contentious until the allegation is sustained or not.

The good news is that you can protect yourself against the misconduct of others by prevention techniques that mesh well with good supervision.

Exactly what are you trying to prevent? Federal regulations define scientific misconduct as fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting, or reporting research. It does not include honest error or honest differences in interpretations or judgments of data. Other types of misconduct can occur in the research setting, but these are addressed through other laws and regulations and are not considered *scientific* misconduct (e.g., theft, harassment, discrimination).

## PREVENTION STRATEGIES

Some believe that if staff or colleagues want to dupe you, they will. I do not think this is true; prevention can work. Begin by making it completely clear that fabricators will be caught. There is no need to say you are monitoring for misconduct, simply let your staff and partners know that you personally check and verify data collection, entry, and any corrections to the data. Then do it, and let them see you doing this! Ask questions about stray marks or erasures. If electronic data are written over or corrected, find out why.

If appropriate and reasonable for the study, ask participants if you may re-contact them for quality control reasons. If they consent to being contacted again, call some from each recruiter or data collector for verification. Ask them if the data collector actually met with them, if they meet the eligibility criteria, if they knew the recruiter/collector before the study, if the study ran the appropriate duration, or if all aspects of consent were covered. Take parallel precautions with animals by tracking animal usage and lab notes carefully.

Set a tone of respect for the research protocol and for study participants. Avoid hyperbole and jokes about getting the data *no matter what*. Someone could confuse your humor with pressure to generate findings through falsification, skimping on the prescribed human or animal protections, improper

analyses, or misleading interpretations of results.

Inoculate staff against the temptation to find a "better" way to run the study midstream. Let them know you want to hear their ideas for the next study, but that fidelity to the current design is essential. Remind them that the current design is the only one approved by the institution's human or animal protection board. Explain what an unrecognized between-subjects variable, such as a shift in procedures for some subjects, does to the study's analysis and interpretation. Then watch for individuals who are working too quickly or too well. Most protocols have an average run time – is anyone collecting data at a suspiciously fast rate? If so, find out why. Are the recruitment rates of one staff member significantly better than all others? Some people just have the knack, but you may want confirmation.

## PROMOTE RESEARCH INTEGRITY

Finally, and most positively, promote research integrity. Do so by teaching it in your classes and labs. Explicitly teach the standards of conduct in research psychology. Review cases of scientific fraud and the ramifications for the researchers, the field, and the public trust. Be sure that you explain what to do if misconduct is suspected at your institution.

Hold lab meetings to explain that some rules are not firm across labs or disciplines (e.g., authorship, ownership of data, and conflicts of interest) and present the rules that your lab follows. These shifting areas all require discussion at the beginning of a new collaboration so your new staff members know what to expect for their degree of contribution. My guess is that few entering graduate students have had such discussions, resulting in feelings of entitlement to authorship or a data file if they collect or analyzed data for you. I know I did. By making the meeting a discussion rather than a lecture about your lab's standards, you can learn about conventions from other labs and can incorporate desirable changes immediately. Such shared expectations avoid misperceptions over breeches in authorship and data access, which although less serious than allegations of falsification, are much more prevalent and generate plenty of hard feelings.

To close with some context, documented scientific misconduct is rare, but a little goes a long way. With each finding of misconduct, researchers across science ask if this could happen in their lab. They look for easy tip-offs to wrongdoing, but by the time there is reason to be suspicious, the damage may be done. By the time someone has made an unauthorized copy of your data set, you are in the thick of it. The smart move is to incorporate preventive strategies into your every day business practices so staff and colleagues know what is expected of them and of you.