

Deborah Johnson's Commentary on "Sherry's Secret"

Commentary On
Sherry's Secret

Professor Norman's behavior is bad science and bad mentoring for a number of reasons. I will separate the steps in his behavior and try to explain why his actions are wrong.

The first act we can distinguish is the act of sending off a paper based on a student's work without informing the student or obtaining her agreement. Even if Sherry had completed the experiments, it would be a breach of trust for Norman to submit her paper without telling her what he is about to do. Just as he should not let any papers go out under his own name unless he has reviewed them, the student, Sherry, entitled to review her papers. Sherry is denied the opportunity to act responsibly with respect to her own work. Norman is at fault both for denying her this opportunity and for failing as a mentor to instill in Sherry a sense of responsibility for her work.

Norman's second improper act is to fabricate data. Fabrication of data is perhaps the most serious breach of research ethics. The foundations of science rest on the accuracy of research results and reporting. Science is a collective activity in which scientists build on one another's work; the whole enterprise depends heavily on the reliability and trustworthiness of each scientist's work. Imagine what would happen to science if scientists could never be certain of the truth of results reported in scientific journals!

Still, let us give Dr. Norman the benefit of the doubt. We might suppose that Norman is so knowledgeable in his field that he could accurately predict the results of Sherry's experiments before they are completed. Even if that were true, it still seems that Norman is taking a short cut and that he does not recognize the whole point of doing science. The point is to verify predictions and thereby move them from hypotheses to evidence. For Norman to bypass this step in doing science is not

only to do bad science, it is, in an important sense, to cease to do science at all.

By his initial actions (submitting the paper without telling the student and fabricating data), Norman traps the student in a no-win situation. Whatever Sherry does after she discovers what he has done, she jeopardizes her career. If she makes waves about what Norman has done, she might be considered a whistle-blower or trouble-maker. Even if she isn't perceived as a trouble-maker, she jeopardizes her relationship with Norman, who has a good deal of power over her career. On the other hand, if she does nothing, she runs the risk of the published article being a false representation of her research; that is, she runs the risk of becoming a co-conspirator in fabrication.

Given that Norman has trapped her in a no-win situation, I sympathize with Sherry's decision to wait until the results of her experiments are in. Of course, the risk remains that if the results do not confirm what the professor fabricated, she will be in deeper trouble. She will have knowingly let his fabrication go, and she will have to take more disruptive action to correct his wrong.

Once Sherry completes her research and finds that her results conform to Norman's fabrication, some of the pressure is relieved. At least her published results will not be false. Still, the process has been bad and it was just a matter of luck that she isn't going to publish false results. Sherry ought to do something. As the case goes, she discovers that Norman has done the same sort of thing with other students. However, that seems irrelevant since the one incident is enough to justify action.

What should Sherry do? It might be a good idea for Sherry to wait until she has defended and moved to her post-doc. Then she should contact an appropriate person back at the institution where she worked with Norman. He will still be in a position to damage her career, but she can attempt to have her concerns addressed while remaining anonymous.

I should add here that one option that Sherry had throughout the case was to go to someone with authority, report her concerns, get advice, and try to remain anonymous. I was reluctant to propose this solution because it is often difficult to remain anonymous, and often there is no clearly appropriate person to report to. Nevertheless, it is generally a good idea to keep someone informed as to your actions, even if you ask them not to act.