Bioethics

Is Honesty Always the Best Policy?

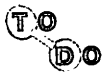
In an academic research facility, such as a university laboratory, professors write grant proposals to obtain funding for research. Often, they need to acquire hundreds of thousands of dollars in grants to keep themselves and their researchers employed. They also need funding to pay for reagents, supplies, and equipment.

Grants are available from public and private sources. The majority of research funding is provided through grants from the federal government. Nonprofit organizations or foundations, such as the American Cancer Society or the American Heart Association, also provide grants and funding.

There is a lot of competition for limited funding dollars. If laboratories produce "good" quality research and large amounts of data, the grant proposal is looked upon favorably by the granting organizations. This creates pressure on scientists to get "good results."

In laboratory research, though, most hypotheses are not well supported by data. The majority of experiments give data that are unexpected or unsupported. Researchers often joke that only about 5 percent of experiments work. This is not a "bad thing." It is simply the nature of science that many unexpected factors can affect experiment results. Through setbacks and unsupported hypotheses, scientists redesign experiments and conditions to get reliable data.

The scientific environment demands honesty from researchers. Scientists must be trusted to present accurate, authentic data. Researchers who are found to have presented falsified data are barred from future funding and support. It is not difficult to imagine that scientists regularly face ethical dilemmas, given the pressure to "publish or perish," and to acquire grants and funding. It might be tempting to falsify or exaggerate data or results, but scientists must be trusted to be ethical.



Decide what steps to take when presented by scientific dishonesty.

Read, review, and reflect on the scenario that follows. Decide what you would do if you were the technician observing potential dishonesty. Then write at least a one-half page discussion outlining your position regarding the situation, and how and why you made the decision.

Scenario: You have been a lab technician in a breast cancer research laboratory at a prestigious university for the past 8 months. Your team (professor, postdoctoral student, three research associates, and a lab technician) has been working to develop a new, modified version of a protein that will recognize breast cancer cells and cause the body to destroy them. In early trials, 80% of the breast cancer cells were recognized and destroyed after treatment with the new protein. An annual grant for another $800,000 of funding is due at the National Institutes of Health (NIH) by 6 pm on Friday. It is 4 pm on Tuesday, and the most recent data, which must be included in the grant application, show that only 20% of the breast cancer cells are destroyed after treatment. This percentage is not very impressive, especially when many of the mice tested with the protein developed sleepiness and other side effects. The professor still believes that the protein can be effective and that the second experiment was flawed. Without the grant, the lab will have to be shut down in 6 months. The postdoctoral student proposes ignoring the second set of data. He says, "Once we get the funding, we can retest. I am sure our results will support the original data." What would you say to the professor and postdoc? Do you support the postdoctoral student's position? Should the professor follow his advice? Why or why not?