

NATIONAL SCIENCE FOUNDATION OFFICE OF INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

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A University notified us it conducted an inquiry into allegations of falsification against a professor and concluded an investigation was warranted. Specifically, the professor allegedly altered a figure in a manuscript to show a desired result rather than the experimental result.

The professor told the investigation committee (IC) that he altered the figure because his students did not properly analyze the experimental data, so it was a correction, not a falsification. The IC found the professor had no evidence to support his response, and there was ample evidence that he altered the figure to enhance the results to get a manuscript accepted for publication. The IC concluded the professor falsified the figure and accompanying caption.

During its investigation, the IC learned of two additional allegations against the professor. In both instances, the IC learned the professor provided his graduate students with questionable data of unknown provenance. In one instance the student provided a sample for analysis to the professor, which the professor claimed to be sending out for external analysis. The professor then provided the resulting data to the student. The student subsequently realized he had inadvertently forwarded the wrong sample to the professor; thus, the resulting data *could not* have come from the sample provided. The IC concluded those data were fabricated.

In the other instance, the professor claimed a named colleague provided him the questioned data at a conference, so the graduate student was wrong about the lack of provenance. The IC learned the professor did not attend that conference and that colleague did not exist. The professor subsequently admitted he fabricated those data and told the IC he could not justify his stupidity in trying to blame his graduate student or lying to the IC.

The University found that the professor committed the three acts deliberately (one falsification, two fabrications), that the acts were significant departures from community standards, and, thus, it concluded the professor committed research misconduct. Based on the research misconduct and the numerous aggravating factors, the University terminated all the professor's positions at the University.

We accepted the University's report and concurred with its findings. Based on the evidence, we recommended that NSF:

- Send the professor a letter of reprimand notifying him that NSF made a finding of research misconduct;
- Debar the professor for 5 years; and
- Require the professor to certify to NSF his completion of a responsible conduct of research training program and provide documentation of the program's content within 1 year of NSF's finding.

Further, for 7 years from the date of NSF's finding, *i.e.*, concurrently with the debarment and 2 years afterward, we recommended that NSF:



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- Bar the professor from participating as a peer reviewer, advisor, or consultant for NSF;
- Require that for each document to which the professor contributes for submission to NSF, the professor submit a contemporaneous certification to NSF that the document does not contain plagiarism, falsification, or fabrication; and
- Require that the professor submit contemporaneous assurances from a responsible official of his employer to NSF that the document does not contain plagiarism, falsification, or fabrication.
- Require the professor to submit to NSF, for each NSF proposal, a detailed data management plan including requirements for notebooks and data archiving to be adhered to during the course of any resulting award, and provide annual certifications that this plan is being implemented; and that the professor submit to NSF, for each NSF proposal, a detailed mentoring plan and provide annual certifications that this plan is being implemented.
- Require the professor to submit to NSF for each NSF proposal a detailed mentoring plan describing the responsible conduct of research training each student, postdoctoral researcher, or other lab member funded by any resulting award will receive, and to provide annual certifications that this plan is being implemented.

NSF implemented the recommended actions, but with different time periods. NSF debarred the professor for 3 years but extended the requirement for submission of certifications and assurances to 5 years after the debarment. It required submission of a mentoring plan for 2 years after the debarment ends. This case is *closed* with no further action taken.