

Proper Scholarship and Attribution

Our office has recently observed an increase in research misconduct allegations involving inaccuracies in data, especially as they are presented in figure form. We have seen several cases where PIs have not made clear the full details of how an image was constructed, such that it can deceive the reader as to what the figure actually represents. Simultaneously, we have seen an increased awareness by professional journals clarifying their expectations with regard to data presentation, particularly images. While NSF's *Grant Proposal Guide (GPG)* explains that NSF expects strict adherence to the rules of proper scholarship and attribution, the current guidance is silent concerning the scholarly presentation of data, figures, graphs, and images.

We recommended NSF change the language in the *GPG* to alert PIs to its expectation that they prepare proposals with at least the same care as they would a peer reviewed publication as well as to clarify to PIs that the expectation applies to text, data, figures, and images. NSF proposed changes to the *GPG* language to ensure that readers understand that fabrication and falsification, as well as plagiarism, are research misconduct. The *GPG* will clearly state that NSF expects strict adherence to the rules of both proper scholarship and attribution in submitted proposals.