

Dear Ms. Mar,

Thank you for the opportunity to address your questions. The America COMPETES Act required

each institution that applies for financial assistance from the Foundation for science and engineering research or education describe in its grant proposal a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduate students, graduate students, and postdoctoral researchers participating in the proposed research project.

NSF implemented this by the following (applicable to grants awarded after January 4, 2010):

- a. An institution must have a plan in place to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates, graduate students, and postdoctoral researchers who will be supported by NSF to conduct research. As noted in GPG Chapter II.C.1.e, institutional certification to this effect is required for each proposal.
- b. While training plans are not required to be included in proposals submitted to NSF, institutions are advised that they are subject to review, upon request.
- c. An institution must designate one or more persons to oversee compliance with the RCR training requirement.
- d. Institutions are responsible for verifying that undergraduate students, graduate students, and postdoctoral researchers supported by NSF to conduct research have received training in the responsible and ethical conduct of research.

NSF's implementation raises several questions we expect this review to address, namely,

- i) What, if any, is the impact of NSF's decision to alter the focus of RCR training from those who participate in NSF research (as stated in the COMPETES Act) to only training those who are directly supported by NSF funding? One consequential example is if a PI had two students working in the lab participating in NSF-funded research, but only one is supported by the grant and the other not, then only that one would require RCR training.

- ii) NSF requires appropriate training, but allows grantees to define what is appropriate. By gathering the grantee's plans, we can assess various methods by which grantees are meeting the requirement and identify best practices as well as practices we believe may be problematic. If a significant number of plans implement practices which are problematic, NSF can consider whether it should put forth guidance on what defines appropriate training. (Queries from subjects of our research misconduct investigations and one comment from the Federal Register (Commenter 1) would indicate yes
- iii) Do institutions want more guidance or do they like having no requirements for course structure and content? As an example, NIH also requires RCR training, but has specific guidance about what it expects in an RCR program. Since grantees have to comply with both programs, we would like to know how grantees meet the disparate requirement of both agencies and whether a more unified approach would better serve NSF and the grantees. We also want to assess whether having two programs causes more of a burden for grantee institutions.

We hope this clarifies the purpose of our oversight review (not an audit). As you can see, we are interested in not only whether grantees minimally comply with the requirement, but how they do comply. As we responded to Commenter 3 (Federal Register Vol. 78, No. 105, May 31, 2013, p. 32694), we are not conducting an RCR audit to determine the effectiveness of the program, nor are we requiring the grantees do so.

In your second paragraph, you raised a number of questions. As you will note from NSF's implementation, it does not require each proposal to include an RCR plan. Thus, grantee institution will have a single plan, rather than a different plan for each proposal. We will be requesting that plan as part of our initial document request (see our sample engagement letter Appendix A1 of our package).

We hope this background on the COMPETES Act and NSF's implementation, and the differences in the two, along with our elaboration of our goals answers your questions about the purpose of our review. If you have any other questions, please contact us.