National Science Foundation Office of the Director Arlington, VA 22230

Notice No. 140

August 17, 2017

IMPORTANT NOTICE TO PRESIDENTS OF UNIVERSITIES AND COLLEGES AND HEADS OF OTHER NATIONAL SCIENCE FOUNDATION AWARDEE ORGANIZATIONS

SUBJECT: Training in Responsible Conduct of Research – A Reminder of the NSF Requirement

The National Science Foundation (NSF) requires that each institution submitting a proposal certify that it has a plan to provide appropriate training and oversight in the ethical conduct of research to all undergraduates, graduate students, and postdoctoral researchers who will be supported by NSF to conduct research. The institutions are responsible for verifying that the training has been received. This is in accordance with the 2007 <u>America COMPETES Act</u>.ⁱ

The NSF recognizes the importance of research integrity and the responsible and ethical conduct of research. The scientific research enterprise is critical to our nation, and its progress depends on maintaining integrity in the process of conducting research. A recent report by the National Academies of Sciences, Engineering, and Medicine, called *Fostering Integrity in Research*, notes that the core values and guiding norms underpinning research integrity are crucial to assure that new generations of researchers are able to meet the challenges of a dynamic research environment.ⁱⁱ

NSF's Responsible Conduct of Research (RCR) requirement applies to the breadth of research disciplines the Foundation funds and the different educational levels of the students and post-doctoral researchers the agency supports. The training should be effective and appropriately tailored to the specific needs and circumstances at each university. Accordingly, it is the responsibility of each institution to determine both the focus and the delivery method for appropriate training.

The NSF Office of the Inspector General (OIG) has studied a sample of academic institutions to find out how they have implemented the <u>RCR requirement</u>.ⁱⁱⁱ I encourage you to read the OIG report as well as the <u>Fostering Integrity in Research</u> report cited above. Both of these reports draw attention to the importance of maximizing the effectiveness of RCR education. The OIG report suggests that universities could benefit from best practices. I would like to draw your attention to Chapters 9 and 10 in the <u>Fostering</u> <u>Integrity in Research</u> report to learn more about some best practices and the many resources available for RCR educational materials and strategies.

I believe we can all do more to achieve and demonstrate the effectiveness of RCR training and improve strategies for fostering research integrity. This will continue to be a topic of discussion at NSF, including the National Science Board, and among the scientific societies, universities, colleges, and other institutions involved in the research enterprise. Thank you for your continued commitment and dedication to this important endeavor.

France A. Córdova Director

End Notes

ⁱ For additional information on NSF's implementation of Section 7009 of the America COMPETES Act, please see the links to Federal Register Notices and NSF-funded resources on the NSF website at: <u>https://www.nsf.gov/bfa/dias/policy/rcr.jsp</u>.

ⁱⁱ National Academies of Sciences, Engineering, and Medicine. 2017. *Fostering Integrity in Research*. Washington, DC: The National Academies Press. <u>https://doi.org/10.17226/21896</u>.

ⁱⁱⁱ National Science Foundation, Office of Inspector General. 2017. "OIG Review of Institutions' Implementation of NSF's Responsible Conduct of Research Requirements." OIG Tracking No. PR12030006. <u>https://www.nsf.gov/oig/_pdf/RCR_MIR_Final_7-25-17.pdf</u>.