



National Science Foundation
4201 Wilson Boulevard
Arlington, Virginia 22230

NSF 16-137

Dear Colleague Letter: Robust and Reliable Research in the Social, Behavioral, and Economic Sciences

September 20, 2016

Dear Colleague:

With this Dear Colleague Letter, the Directorate for Social, Behavioral, and Economic Sciences (SBE) announces its interest in stimulating research and other activities to enhance the robustness and reliability of research in the social, behavioral, and economic sciences. As defined in the SBE Advisory Committee 2015 report, *Social, Behavioral, and Economic Sciences Perspectives on Robust and Reliable Science*, “robust and reliable” science refers to research that is reproducible, replicable, and generalizable. *Reproducibility* refers to the ability of a researcher to duplicate the results of a prior study using the same materials and procedures used by the original investigator. *Replicability* refers to the ability of a researcher to duplicate the results of a prior study if the same procedures are followed but new data are collected. *Generalizability* refers to whether the results of a study apply in other contexts or populations that differ from the originals. Robust and reliable research is the foundation of all scientific development and progress, which depends critically on the ability of investigators to build on prior work.

To enhance the robustness and reliability of fundamental research in the social, behavioral, and economic sciences, SBE invites the submission of proposals for the following types of projects to its standing programs:

- Research to determine the extent of, causes of, or remedies for research in the social, behavioral, and economic sciences that is neither replicable, reproducible, nor generalizable;
- Methodological development to improve the robustness/reliability of research in the social, behavioral, and economic sciences (e.g., improvements in study design, data-sharing techniques, analytic techniques);
- Outreach/training/workshops designed to enhance the robustness and reliability of research in the social, behavioral, and economic sciences, including increasing acceptability of explicit research in this area; and
- Reproductions, replications, or generalizations of seminal or pivotal studies that have served a demonstrably critical role in conceptual or empirical progress in the social, behavioral, and economic sciences, including generalizations that demonstrate validity in atypical or nontraditional populations and samples. Reproduction, replication, or generalization projects require clear justification of the fundamental role of the seminal or pivotal studies in the scientific advance of social, behavioral, or economic sciences.

Investigators interested in this opportunity should submit proposals to the most relevant SBE program and designate the proposal as being related to robust and reliable science by including “RR:” at the beginning of the proposal title. SBE’s programs are described on the following websites:

- Division of Behavioral and Cognitive Sciences: <http://www.nsf.gov/funding/programs.jsp?org=BCS>;
- Division of Social and Economic Sciences: <http://www.nsf.gov/funding/programs.jsp?org=SES>; and
- SBE Office of Multidisciplinary Activities: <http://www.nsf.gov/funding/programs.jsp?org=SMA>.

Successful research proposals will have scientifically sound research plans that are explicitly rooted in relevant theory and literature. Proposals will be evaluated using the standard National Science Board approved merit review criteria of intellectual merit and broader impacts, as well as their potential contribution to enhancing robust and reliable science. Specific questions about an SBE program should be directed to the program director of the program. This is not a special competition or new program; proposals in response to this Dear Colleague Letter must meet the requirements and deadlines of the program to which they are submitted.

Sincerely,
Dr. Fay Lomax Cook
Assistant Director
Directorate for Social, Behavioral & Economic Sciences