

United States Senate

WASHINGTON, DC 20510
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July 29, 2022

Delivered via E-mail

The Honorable Sethuraman Panchanathan
Director
National Science Foundation
2415 Eisenhower Avenue
Alexandria, Virginia 22314

Dear Director Panchanathan:

The National Science Foundation (NSF) is an important part of the federal government's research enterprise. However, over the years, many questions about the integrity and importance of NSF's mission have arisen. Scrutiny by Congress, the Government Accountability Office (GAO), and the NSF Office of Inspector General (OIG) demonstrate widespread issues of fraud, waste, and abuse.

We have a growing concern that tens of millions of dollars have and continue to be spent on studies of questionable value. While not all of these studies are obvious wastes of taxpayer dollars, many still raise major concerns about the importance of your agency's mission. The statutorily intended mission for NSF is "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense."

These concerns are compounded when NSF funds research projects with a particular political bent. For example, in 2016, the NSF provided nearly \$650,000 to study whether undergraduate programs based on social justice ideas advance students' understanding of Science, Technology, Engineering, and Mathematics (STEM) courses.¹ While NSF enjoys independent status in order to protect the agency's scientific mission, grants such as these call into question the NSF's impartiality and whether the agency considers it is appropriate to fund projects leveraged for political advocacy.

We live in a time where most Americans are trying to make ends meet to put food on the table and gas in the cars, meanwhile our government agencies seem to be spending money frivolously on a wish list of special interest research projects. Given these concerns, we are beginning an oversight investigation into NSF's grant-making processes. This is the first of several letters we will be sending your agency.

We appreciate your willingness to provide information and thank you in advance for your commitment to a timely response to my questions. Please provide a response to each of these questions by August 3, 2022. Instead of a narrative response, please provide an answer below each question.

1. Provide a summary and a copy of NSF's Strategic Budget Plan.
 - a. What criteria does NSF consider important when approving its strategic budget plan?
 - b. What are NSF's budget priorities and how does it determine those priorities?
 - c. Please provide a mapping of each of NSF's budget priorities to NSF's statutory mission.
2. How does NSF approve new programs for funding opportunities?

¹ https://nsf.gov/awardsearch/showAward?AWD_ID=1564608&HistoricalAwards=false

3. Please provide an outline of the grant review and award process. In addition, please respond to each of the questions below separately.
 - a. What are the standards for the review process when considering awarding a grant?
 - b. Does the agency have a step in the review process where it considers the value and benefits of the proposed scientific research?
 - i. If so, how does the agency measure the value of the proposed research?
 - ii. What are the merits, if any, that applications must demonstrate in order to receive an award?
 - c. What other criteria are considered when evaluating grant applications?
 - d. Does the agency consider whether applicants have the resources, skills, expertise, and personnel when awarding grants?
 - e. Does the agency consider whether the proposed research conflicts with the agency's status as an independent agency? If so, how?
 - f. In the NSF's Proposal & Award Policies & Procedures Guide (PAPPG), it states the agency receives more than 41,000 proposals for research each year, and approximately 11,000 are funded.
 - i. Does the agency have a process to prioritize which proposals to fund?
 - ii. If yes, please provide a detailed outline of the process.
4. Does the agency have procedures to ensure a grant applicant does not have any financial or non-financial conflicts of interest? If so, please provide a detailed outline of those processes.
5. In 2020, GAO published a report that recommended that NSF should include a definition on non-financial conflicts in its agency policies, and address these conflicts, both foreign and domestic. NSF stated it had taken action to address the risk of foreign influence. However, as of February 2022, NSF had not taken any action to address GAO's specific 2020 recommendation. As concerns of foreign influence in research grow amongst the American people, please provide answers to the below questions:
 - a. Has the NSF taken any actions to address the recommendation made in the 2020 GAO report?
 - b. What "actions" has NSF taken to address the risk of foreign influence?
 - i. Are there specific procedures in place to ensure that NSF grantees do not have non-financial conflicts of interest or otherwise are susceptible to foreign influence?
 - ii. What is NSF's definition of non-financial conflicts?
 - c. What does NSF do if it finds a grantee is being affected by foreign influence?
 - d. Does NSF have any ongoing oversight over grantees at every step of the research? Or is conflict oversight only conducted at the time the grant is administered?
6. Does the agency have processes in place to ensure a grant applicant is free of foreign influence? If so, please provide a detailed outline of those processes.
 - a. Does the agency consider whether research can be conducted in the United States when approving an award?
 - i. What criteria must an applicant meet before the agency approves an award for research done on foreign soil?

- b. How does NSF ensure that awards carried out will not benefit foreign adversaries?
 - c. Does the agency have any policies against funding research in any specific countries?
 - d. Does the agency have any policies against funding research in conjunction with foreign entities of concern like the People's Liberation Army?
 - e. In 2017, NSF awarded a \$50,000 grant to study and understand "the sources of the resurgent conflict between Russia and the U.S."
 - i. Did NSF have any safeguards in place or conduct oversight to ensure this research was free of foreign influence?
 - ii. According to the Award Abstract, the end date was estimated for June 30, 2020. Has this award ended or is it ongoing? How is the agency conducting oversight over this award?
7. Once a grant is awarded, does the agency have processes to conduct oversight over grantees' usage of grant funds? If so, please provide a detailed outline of those processes.
8. On June 30, 2021, you received a set of letters with questions about outstanding recommendations made by the OIG and GAO to either reduce the risk or address identified instances of fraud, waste, and abuse. In the NSF OIG's March 2021 semiannual report to Congress, the NSF OIG found \$2.6 million of questioned costs from four audited NSF award recipients, and recommended that "NSF direct award recipients to strengthen controls over the areas that led to the questioned costs and that NSF recover the questioned costs." You stated that "NSF expects that resolution of the reports will completed no later than March 31, 2022."
 - a. Has NSF completed this recommendation? If not, why?
 - b. Has NSF recovered the questioned costs? If so, how much?

Sincerely,



Richard Burr
Ranking Member
U.S. Senate Committee on Health,
Education, Labor and Pensions



Rand Paul
U.S. Senator



Ted Cruz
U.S. Senator