SUPPORTING STATEMENT FOR PAPERWORK REDUCTION SUBMISSION

MATHEMATICAL SCIENCES POSTDOCTORAL RESEARCH FELLOWSHIP APPLICATION FORMS

A. JUSTIFICATION

1. CIRCUMSTANCES MAKING COLLECTION OF INFORMATION NECESSARY

Background. The National Science Foundation Act of 1950 (Public Law 81-507) set forth NSF's mission and purpose:

> "To promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense...."

The Act authorized and directed NSF to initiate and support:

- basic scientific research and research fundamental to the engineering process,
- programs to strengthen scientific and engineering research potential,
- science and engineering education programs at all levels and in all the various fields of science and engineering,
- programs that provide a source of information for policy formulation,
- and other activities to promote these ends.

Over the years, NSF's statutory authority has been modified in a number of significant ways. In 1968, authority to support applied research was added to the Organic Act. In 1980, The Science and Engineering Equal Opportunities Act gave NSF standing authority to support activities to improve the participation of women and minorities in science and engineering.

Another major change occurred in 1986, when engineering was accorded equal status with science in the Organic Act.

NSF has always dedicated itself to providing the leadership and vision needed to keep the words and ideas embedded in its mission statement fresh and up-to-date. Even in today's rapidly changing

environment, NSF's core purpose resonates clearly in everything it does: promoting achievement and progress in science and engineering and enhancing the potential for research and education to contribute to the Nation. While NSF's vision of the future and the mechanisms it uses to carry out its charges have evolved significantly over the last four decades, its ultimate mission remains the same.

2. HOW, BY WHOM, AND PURPOSE FOR WHICH INFORMATION IS TO BE USED

The information gathered with the Mathematical Sciences Postdoctoral Research Fellowship Application Forms (Note: The Graduate Research Fellowships Program – 3145-0023 – is the information collection which houses this and all of the graduate and postdoctoral programs managed by NSF) serves for facilitating the proposal review process. Since peer review is a key component of NSF's grant-making process, it is imperative that proposals are reviewed by scientists with appropriate expertise. The collected information about the 2010 Mathematics Subject Classification codes of the about 250 submitted proposals helps to ensure that the comparable groups of proposals are evaluated by specialists who are well versed in appropriate subject matters. This helps maintain a fair and equitable review process. The information on the applicants' PhD institution, current employment place, and Fellowship institution, as well as prospective mentor's name will allow potential reviewers to determine conflicts of interest *before* reading proposals, thus ensuring fare review process.

3. USE OF AUTOMATION

The collection of information will be fully electronic and occur via NSF's already existent web-based program, FastLane.

4. EFFORTS TO IDENTIFY DUPLICATION

As the information requested is specific to an individual proposal submission, duplication would only occur if the same information were being requested by another area of the Foundation at the time of submission. Currently, that is not the case, and the information the

Directorate is requesting is unique and specific for the Mathematical Sciences Postdoctoral Research Fellowship program. The Directorate of Mathematical and Physical Sciences has a continuing commitment to monitor its information collection in order to preserve its applicability and necessity. Through periodic updates and revisions, the Directorate ensures that only useful, non-redundant information is collected. These efforts will reduce excessive reporting burdens.

5. SMALL BUSINESS CONSIDERATIONS

There is no significant impact on small entities.

6. CONSEQUENCES OF LESS FREQUENT COLLECTION

The collected information is specific to each proposal being submitted to the Mathematical Sciences Postdoctoral Research Fellowship program, so it is most reasonably collected at the time of proposal submission.

7. SPECIAL CIRCUMSTANCES FOR COLLECTION

N/A

8. FEDERAL REGISTER NOTICE.

The Mathematical Sciences Postdoctoral Research Fellowships application form was published for public comment in the Federal Register at 84 FR 12009. No comments were received.

OUTSIDE CONSULTATION

Every four years, Divisions within the Mathematical and Physical Sciences Directorate are reviewed by a panel of outsiders referred to as a Committee of Visitors. The Committee reviews Fellowship Application Form, and will have the opportunity to comment on the form's use, appropriateness, and effectiveness.

9. GIFTS OR REMUNERATION

There are no payments or gifts associated with this information collection.

10. CONFIDENTIALITY PROVIDED TO RESPONDENTS

The Foundation is committed to monitor and identify any real or apparent inequities based on gender, race, ethnicity, or handicap of the applicants. The collection of this information is a part of all regular applications to the Foundation. Information concerning the applicants is maintained in accordance with the requirements of the Privacy Act of 1974. The Graduate Research Fellowships Program has its own Privacy Act System of Records – NSF-12. No personal information is released to the public. Following is a link from NSF's home page: https://www.nsf.gov/privacy/NSF-12_Fellowships_and_Other_Awards.pdf. The program also follows the Privacy Act Systems of Records for Principal Investigators (50), and the one for Reviews (NSF-51): https://www.nsf.gov/privacy/NSF-50_Principal_Investigator_Proposal_File_and_Associated_Records.pdf; https://www.nsf.gov/privacy/NSF-51_Reviewer_Proposal_File_and_Associated_Records.pdf

11. QUESTIONS OF A SENSITIVE NATURE

None of the information being collected is of a sensitive nature

12. ESTIMATE OF BURDEN

The estimated annual hour burden is 125 hours. The Directorate anticipates 250 respondents each giving one response. The estimated time per response is 30 minutes. This was calculated by averaging the response time of a sample of five individuals.

ANNUALIZED COST TO RESPONDENTS

The mean annual stipend for PhD candidates is $30,000 which translates to an hourly wage of $15.00. The total estimated annualized cost to respondents is therefore $1,875.

13. CAPITAL/STARTUP COSTS

NSF does not require respondents to purchase or lease equipment to complete our information collection.

14. ANNUALIZED COST TO THE FEDERAL GOVERNMENT

Making use of preexisting infrastructure for both collection and maintenance, this information collection comes at no additional cost to the federal government.

15. CHANGES IN BURDEN

N/A

16. PUBLICATION OF COLLECTION

N/A

17. SEEKING APPROVAL TO NOT DISPLAY OMB EXPIRATION DATE

N/A

18. EXCEPTION(S) TO THE CERTIFICATION STATEMENT (19) ON OMB 83-I

N/A