NATIONAL SCIENCE FOUNDATION

SUPPORTING STATEMENT FOR PAPERWORK REDUCTION ACT SUBMISSION NATIONAL SCIENCE FOUNDATION GRADUATE RESEARCH FELLOWSHIP PROGRAMS 3145-0023

A. Justification

1. Circumstances making the collection of information necessary.

The missions of the National Science Foundation are to: increase the Nation's base of scientific and engineering knowledge and strengthen its ability to conduct research and education in all areas of science and engineering that can better prepare the Nation to meet the challenges of the future and promote international cooperation through science and engineering. The Foundation also is committed to ensuring the Nation's supply of scientists, engineers, and science educators. In its role as a leading Federal supporter of science and engineering, NSF also has an important role in national policy planning.

Section 10 of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1869), states that "[t]he Foundation is authorized to award scholarships and graduate fellowships for study and research in the sciences or in engineering at appropriate nonprofit American or nonprofit foreign institutions selected by the recipient of such aid, for stated periods of time."

The purpose of the NSF Graduate Research Fellowship Program (GRFP) is to help ensure the vitality and diversity of the scientific and engineering workforce in the United States. The program recognizes and supports outstanding graduate students who are pursuing research-based master's and doctoral degrees in fields within NSF's mission. The GRFP provides three years of support, to be used during a five-year fellowship period, for the graduate education of individuals who have demonstrated their potential for significant achievements in science and engineering research. Specifically, the program goals are:

- To select, recognize, and financially support individuals early in their careers with the demonstrated potential to be high achieving scientists and engineers,
- To broaden participation in science and engineering of underrepresented groups, including women, underrepresented minorities, and persons with disabilities.

Among the first programs offered by the National Science Foundation at its inception in 1952 were a Graduate and Postdoctoral Fellowships Program. There are now many more individual programs at NSF. The largest program, the Graduate Research Fellowship

Program, is administered by the Division of Graduate Education, Education and Human Resources Directorate.

NSF GRADUATE RESEARCH FELLOWSHIP PROGRAMS

Following is a list of NSF Graduate and Postdoctoral Fellowship Programs that includes, but is not limited to (Note: information about each program can be found via http://www.nsf.gov/fastlane):

- Graduate Research Fellowship Program
 East Asia and Pacific Summer Institutes for U.S. Graduate Students (EAPSI)

 International Research Fellowship Program

 Mathematical Sciences Postdoctoral Research Fellowships

 Minority Postdoctoral Research Fellowships and Supporting Activities

 MPS Distinguished International Postdoctoral Research Fellowships (MPS-DRF)

 NSF Astronomy and Astrophysics Postdoctoral Fellowships

 NSF Distinguished Teaching Scholar Program

 Postdoctoral Fellowships in Microbial Biology

 Postdoctoral Fellowships in Polar Regions Research

 Postdoctoral Research Fellowships in Biological Informatics
- Doctoral Dissertation Enhancement Projects (DDEP))
- Doctoral Dissertation Improvement Grants in the Directorate for Biological Sciences
- NSF Astronomy and Astrophysics Postdoctoral Fellowships
- Pan-American Advanced Studies Institutes Program

- Partnerships for International Research and Education
- Science and Technology Studies (STS)

All of the above programs are available only by electronic dissemination via FastLane (http://www.nsf.gov).

2. How and By Whom the Information will be Used.

The information collected is used to support the Graduate Research Fellowship Program of the Foundation. The information collected is used in application assignments and referral, initial review, award processing and grant accounting. The database is used to provide complete, accurate, and up-to-date reports to all levels of management.

The program uses multiple data sources for program improvement and program oversight, including data compiled from the applications, awardees, honorable mentions and declinations. The data are tracked over multiple years to examine trends and identify gaps that need to be addressed in subsequent competitions. As an example, outreach in the preparation of competitive applications has been identified for targeted groups. Under GPRA, NSF tracks the number of eligible applications submitted by applicants from underrepresented groups.

The information collected on gender, race, ethnicity or disability is used in meeting NSF needs for data to permit response to Congressional and other queries into equity issues. These data also are used in the design, implementation, and monitoring of NSF efforts to increase the participation of underrepresented groups in science or engineering.

The Science and Technology Equal Opportunities Act, Part B of Pub. L. No. 96-514, as amended, authorizes and requires NSF to increase the participation of underrepresented groups in science and engineering. In addition, the Act specifically authorizes the Foundation to "undertake or support a comprehensive science and engineering education program to increase the participation of minorities in science and engineering."

3. Consideration of the Use of Information Technology.

All eligible individuals are encouraged to submit their applications through the Foundation's FastLane submission process. Approximately 12,000 applications are received each year and all are submitted via FastLane.

4. Efforts to Identify Duplication.

NSF has attempted to eliminate collection of duplicate information for each individual. For the Graduate Research Fellowship Program, data collected at the application stage is folded into an awarded Fellow database, eliminating the need for new data capture. Fellows are permitted to update their information as needed.

5. Efforts to Minimize Burden on Small Entities.

Small entities are not affected by this information collection.

6. Consequences if Data Collection is Not Conducted.

Since each application is evaluated on its own merits, by selected reviewers, applicants are required to submit separate applications, each accompanied with applicable forms. Only one application may be submitted in each application cycle. Reviews are conducted annually; pools of potential applicants change regularly.

7. Circumstances Requiring Deviation from Guidelines of 5 CFR 1320.

Not applicable.

8. Federal Register Announcement and Other Consultations Outside the Agency.

The first notice was published in the *Federal Register* on April 29, 2011 (73 FR 30421) and no comments were received.

The processes for announcing availability of support and for receiving applications and making awards have been developed over the life of the Foundation, with the assistance of many outside sources. These sources include other Federal agencies, business officers representing institutions of higher education, and individuals submitting the application.

9. Payments to Respondents.

Not applicable.

10. Confidentiality.

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. No personal information is released to the public.

11. Sensitive Questions.

Information collected on gender, citizenship, race, ethnicity, or disability is collected as a part of the electronic application. NSF retains these data as an integral part of its Privacy Act System of Records, NSF-12, "Fellowships and Other Records" (revised at 63 FR 264, January 5, 1998). This information is treated as confidential to the extent permitted by law.

12. Response Burden Hours.

The Foundation receives approximately 12,000 fellowship applications annually. We have estimated that an average of approximately 12 burden hours are expended by the public for each application for an annual total of 144,000 hours. The change is due to a review of actual applicants over the past few years and the adjustment is reflected in this request for approval.

13. Burden Cost to Respondents.

There is no cost to the applicant above the expense of preparing and submitting the application – Student completes the application package—estimating cost of stipend annual cost is \$36,000; \$17/hour x 12 hours = \$204 per applicant. This figure is estimated at \$36,000 per year; \$17 per hour.

14. Annualized Cost to the Federal Government.

It is difficult to estimate the annualized cost to the Federal government in terms of number of hours expended, salaries, equipment involved, etc., because applications are received throughout the year and the number of proposals received varies from year to year. The staffs responsible for processing applications are full-time employees ranging in grade levels from GS-9 to GS-15. In addition, the programs are dependent on external peer reviewers from the scientific and engineering communities at large. A panel composed of a diverse group of individuals who are recognized experts in the relevant academic disciplines and have experience in graduate education reviews each application.

15. Reasons for any Program Changes (Items 13 or 14).

Changes for this request include upload of electronic transcripts and self-certification by the applicant. These changes do not incur a change in burden from the last time this collection was approved for the 2008 request.

16. Publication of Information.

Not applicable.

17. Display of Expiration Date for OMB Approval.

Many of the Fellowship guidelines for submitting applications are used for several years unless the NSF policy changes regarding those fellowship programs. In those cases we would be required to return to OMB for clearance. NSF is requesting permission to not display the OMB expiration date of approval because it is expected that these forms will not change and the effort of having to revise those electronic forms could be saved.

18. Any Exceptions to the Certification Statement.

There are no exceptions to the Certification Statement.

Part B: Collections of Information Employing Statistical Methods

Not Applicable