# NATIONAL SCIENCE FOUNDATION

# SUPPORTING STATEMENT FOR PAPERWORK REDUCTION ACT SUBMISSION NATIONAL SCIENCE FOUNDATION POSTDOCTORAL and GRADUATE RESEARCH FELLOWSHIPS 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 Foundation's Fellowship and Postdoctoral Programs are designed to meet the following objectives:

- To assure that some of the Nation's most talented students in the sciences obtain the education necessary to become creative and productive scientific researchers.
- To train or upgrade advanced scientific personnel to enhance their abilities as teachers and researchers.
- To promote graduate education in the sciences, mathematics, and engineering at institutions that have traditionally served ethnic minorities.
- To encourage pursuit of advanced science degrees by students who are members of ethnic groups traditionally under-represented in the Nation's advanced science personnel pool.

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, in part, under contract with the American Society for Engineering Education.

## **NSF POSTDOCTORAL FELLOWSHIPS 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 <u>http://www.nsf.gov/fastlane</u>):

- 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
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## • Science and Technology Studies (STS)

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

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

The information collected is used to support graduate and postdoctoral fellowship programs 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 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 various groups in science or engineering. Gender or race is but one of several factors considered in NSF's evaluation of fellowship applications and is only taken into account after an application qualifies on the basis of merit.

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 8,500 applications are received each year, an overwhelming majority of which have been submitted via FastLane.

## 4. Efforts to Identify Duplication.

NSF has attempted to eliminate duplicate information for each individual Fellows Program. For the Graduate Research Fellowship Program, data collected at the application stage are 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. Applicants may apply to all programs for which they are eligible. 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 May 27, 2008 (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 usually collected on a separate form (NSF Form 1225). 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 8,500 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 102,000 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 external reviewers reviews each application.

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

Not applicable – there is no change in burden from the last time this collection was approved.

#### **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 costs of printing could be saved. In the case where forms are available electronically, this also would save the effort of having to revise those forms.

#### **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