SUPPORTING STATEMENT FOR PAPERWORK REDUCTION SUBMISSION

Biological Sciences Proposal Submission Forms (OMB Clearance 3145-0203)

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 Biological Sciences proposal submission forms serve three main purposes. The first is to provide vehicles for applicants to submit applications and reference writers to submit recommendations.

The second is facilitation of 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 information collected with the forms help ensure that the proposals are evaluated by specialists who are well versed in appropriate subject matter. This helps maintain a fair and equitable review process.

The third use of the information is program evaluation. The Directorate is committed to investing in a range of substantive areas. With data from this collection, the Directorate can calculate submission rates and funding rates in specific areas of research. Similarly, the information can be used to identify emerging areas of research, evaluate changing infrastructure needs in the research community, and track the amount of international research. As the National Science Foundation is committed to funding cutting-edge science, these factors all have implications for program management.

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 or application 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. The Directorate of Biological 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, so it is most reasonably collected at the time of proposal submission. Proposals are submitted in response to different solicitations that vary in terms of 1) the types of research being targeted and 2) the submission deadlines. The only way to capture the full breadth of research being proposed is to conduct the information collection at all proposal deadlines. To do otherwise would ignore certain types of research, skew the data, and paint an inaccurate picture of the types of proposals submitted over the course of the year.

7. SPECIAL CIRCUMSTANCES FOR COLLECTION

N/A

8. FEDERAL REGISTER NOTICE.

The Biological Sciences Proposal Classification form was published for public comment in the Federal Register at 80 FR 64024 on February 4, 2019. No comments were received, and NSF is moving forward with plans for clearance of these forms.

OUTSIDE CONSULTATION

Every four years, Divisions within the Directorate are reviewed by a panel of outsiders referred to as a Committee of Visitors. The Committee reviews all Divisional activities, including use of the Biological Classification 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

As participation is voluntary and no sensitive information is being collected, no assurance of confidentiality is given to respondents.

11. QUESTIONS OF A SENSITIVE NATURE

None of the information being collected is of a sensitive nature

12. ESTIMATE OF BURDEN

There are five versions of the Biological Sciences Proposal Classification Form (NSF 1560). There are five Divisions within the Directorate, and each form follows the specific needs for each Division, as follows:

- Division of Integrative Organismal Systems
- Division of Biological Infrastructure
- Division of Environmental Biology

- Emerging Frontiers
- Division of Molecular and Cellular Bioscience

The estimated, aggregated, annual hour burden for all five versions of the form is 567 hours. The Directorate anticipates a total of 6,800 respondents to the Biology Directorate's divisions' program announcements, each giving one response. The estimated time per response is 5 minutes. This was calculated by averaging the response time of a sample of five individuals. All five versions of the form have the same estimated hour burden.

There is one version of the Postdoctoral Research Fellowships in Biology recommendation form. The estimated, aggregated, annual hour burden for the form is 97 hours. The Directorate anticipates a total of 290 respondents to the program announcement, each giving one response. The estimated time per response is 20 minutes.

ANNUALIZED COST TO RESPONDENTS

According to the Bureau of Labor Statistics, May 2018 (http://www.bls.gov/oes/current/ oes251042.htm), the mean annual salary for "Biological science teachers, postsecondary" is \$97,340 which translates to an hourly wage of \$46.80. The total estimated annualized cost to respondents is therefore \$35,615 (\$46.80 x 761).

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

The change in burden is to include the Postdoctoral Research Fellowship in Biology application and recommendation forms.

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

B. STATISTICAL METHODS

Not applicable.