# Presidential Awards for Excellence in Mathematics and Science Teaching 2007 Application Packet

## **Teachers of Grades 7–12** *Application Deadline: May 1, 2007*

Each year, the President of the United States recognizes outstanding kindergarten–6<sup>th</sup>-grade or 7<sup>th</sup>–12<sup>th</sup>grade mathematics and science teachers by bestowing upon them the Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST). Awards are given to teachers in each state and four U.S. jurisdictions, including Washington, DC; Puerto Rico; Department of Defense Schools; and the U.S. territories (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands). The PAEMST program is administered by the National Science Foundation (NSF) on behalf of the White House. The 2007 PAEMST program will honor 7<sup>th</sup>–12<sup>th</sup>-grade mathematics and science teachers, while the 2008 award program will focus on kindergarten–6<sup>th</sup>-grade teachers.

The more than 3,700 awardees selected since the program's inception in 1983 are a premier group of highly qualified teachers who have both deep content knowledge of the subjects they teach and the ability to motivate and enable students to be successful in these areas. While many awardees return to their classrooms, others move on to positions in school administration or become involved in training future teachers at the college level. They remain professionally active in a variety of ways. In addition to teaching, they contribute to the development of instructional and assessment resources, serve as mentors to students and other teachers, participate as writers and reviewers of state and local curricula, and author books and publish articles, among other endeavors. Collectively, they reflect the expertise and dedication of the Nation's teaching corps, and they demonstrate the positive impact of excellent teachers on student achievement.

Each awardee receives a \$10,000 award from NSF and gifts from a broad range of donors. Awardees and their guests are honored during events that take place in Washington, DC, over the course of a week-long celebration. These events include an awards ceremony, celebratory receptions and banquets, and professional development programs.

Administered by NSF on behalf of the President of the United States, the PAEMST program is an activity of NSF's Directorate for Education and Human Resources, Division of Elementary, Secondary, and Informal Education.

# 2007 Program Information

## Eligibility

The following are the eligibility criteria for the 2007 nominees:

- They must be highly qualified teachers, as deemed by their states, districts, or schools; or, in the case of private schools, in the spirit of the principles and provisions of the No Child Left Behind Act of 2002, Public Law 107–110.
- They must hold a degree or appropriate credentials in the category for which they are applying.

- They must be teachers in one of the 50 states or four U.S. jurisdictions. The jurisdictions are Washington, DC; Puerto Rico; Department of Defense Schools; and the U.S. territories as a group (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands).
- They must be full-time employees of the school or school district.
- They must have at least 5 years of mathematics or science teaching experience prior to application.
- They must teach mathematics or science at the 7<sup>th</sup>-12<sup>th</sup>-grade level in a public or private school.
- They must indicate which grade or grades they teach and whether they are to be considered for mathematics or science teaching.
- They must *not* have received the PAEMST Award at the national level in any prior competition or category.

#### **FBI Background Check**

Please note that all PAEMST finalists will be subjected to an FBI background check.

#### Nomination

**Teachers may nominate themselves or someone else may nominate them for this award** (e.g., principals, teachers, parents, or other members of the general public) by completing the nomination form available on the PAEMST Web site at <a href="http://www.paemst.org">http://www.paemst.org</a>. The nomination form must be submitted to the PAEMST state coordinator, whose name and address can be found at <a href="http://www.paemst.org/page.cfm?pageID=5">http://www.paemst.org</a>. A copy of the nomination form should be retained by its author as well as by the nominee.

#### **Selection Process**

All applications will be subjected to the following review process:

- At the state level, coordinators convene local selection committees, which include prominent mathematicians, scientists, mathematics/science educators, and past awardees. These committees select up to three finalists from each category (mathematics or science) for recognition at the state level. Each of the state finalists receives the NSF Certificate of Honor in Mathematics and Science Teaching. To ensure consistency across the country, all state selection committees will score their applications using the criteria and scoring information presented in this application instruction packet.
- At the national level, NSF convenes a national selection committee composed of prominent mathematicians, scientists, mathematics/science educators, and past awardees who review the application packets of the state finalists and recommend to the President of the United States a single finalist in each category (mathematics or science) for each state or jurisdiction.

# **Application Preparation**

Applications must be prepared according to the guidelines contained in this packet and must include a written response to all parts of each dimension and the required demonstration video. The written responses and video must provide evidence of student achievement as an indicator of high-quality, effective teaching on the part of the applicant. All written materials should be typed using a **12-point font on 8** <sup>1</sup>/<sub>2</sub>-**by 11-inch paper, doubled-spaced, single-sided, with at least 1-inch margins all around**. The core component of the application must not exceed **35 pages**, which may include up to **20 pages** of narrative and up to **15 pages** of supplemental materials (e.g., samples of student work, assessments, lesson plans, and data displays). Please refer to the core component instructions below to determine the page restrictions for each element of the core component. **APPLICATIONS THAT EXCEED THE PAGE LIMITS WILL NOT BE REVIEWED.** 

## I. ADMINISTRATIVE COMPONENT

The administrative component includes the original nomination form, letter of employment confirmation, letters of recommendation, and teacher information form.

#### **Nomination Form**

Include **six copies** of the nomination form with the application packet. The nomination form may be obtained from the individual who completed it or from the state coordinator.

#### Letter of Employment Confirmation

Provide a **signed and dated original and five copies** of a letter from the school principal or appropriate district-level administrator (e.g., science coordinator or superintendent of curriculum and instruction) confirming the applicant's full-time employment. The letter should be brief, **must be submitted on school or district stationery**, and must confirm the nominee's science or mathematics teaching assignment. This letter, if expanded, may also serve as one of the three required letters of recommendation.

#### Letters of Recommendation

Submit **three signed and dated** letters of recommendation from parents, colleagues, administrators, or others who can describe how the applicant's work has had a positive impact on student achievement.

#### **PAEMST Application Teacher Information Form**

Provide a signed and dated original and five copies of the completed Teacher Information form.

Please Note: The completed application package must include an original and five copies of the forms and all written materials as well as two complete tapes or disks of the lessons illustrating talent in teaching and evidence of student progress. A two-page résumé that outlines professional growth during the last 5 years also should be included in the application.

## **II. CORE COMPONENT**

The Core Component of the application provides the applicant (you) with the opportunity to describe how your deep content knowledge and exemplary pedagogical skills have resulted in improved student achievement. It is understood that there is no single right or wrong way to teach and, as such, this award is not based on teaching inputs such as pedagogical philosophy, instructional methods, or teaching style. Rather, this award recognizes those teachers who develop and implement a high-quality instructional program that is informed by deep content knowledge and is successful in improving student achievement.

In selecting PAEMST awardees, the state and national selection committees will consider evidence of applicants' performance in five Dimensions of Outstanding Teaching. Each applicant is asked to provide narrative explanations, as well as supporting evidence, in each category. Specific guidelines are embedded throughout the document, and it is crucial that you follow the guidelines as proposed to ensure that you meet all of the requirements.

The application is designed to allow you to describe and demonstrate your deep knowledge of the mathematics or science content, illustrate how you convey that knowledge to students using a variety of pedagogical methods and strategies, discuss how you use assessment to inform your instructional practices and strategies to improve student achievement, and describe how your participation in professional development activities has resulted in improved learning for students and, potentially, teaching colleagues.

The response to the five Dimensions of Outstanding Teaching must be captured in a narrative that does not exceed 20 pages. You may submit 15 additional pages of supplemental materials such as lesson plans, samples of student work, assessment data, or publications. It is important to address each element of the five Dimensions of Outstanding Teaching in the order in which they are presented in this application and to label the narrative document with the appropriate Dimension heading.

In addition to the narrative required by this section, you are also asked to produce a video that will allow the state and national selection committees to observe you and your students in the classroom setting (see Section III: Video Component). Since you must reflect upon this video in the written part of the application, it will be necessary to record the video prior to completing the written responses.

#### Dimensions of Outstanding Teaching to be Addressed for the 2007 Application

The five Dimensions of Outstanding Teaching that must be demonstrated in this application are the following:

- 1. Personal mastery of mathematics or science content at or beyond the level at which you are teaching.
- 2. Use of instructional methods and strategies that are appropriate for the learning styles of the students in the classroom and result in increased achievement by those students.
- 3. Effective use of student assessment tools to evaluate, monitor, and improve student achievement.
- 4. Reflective practice to improve instructional delivery and student outcomes.
- 5. Participation in professional development activities either to improve your personal mastery of content or pedagogical skill or to provide mentorship, instruction, or support to other teachers who are participants in such programs.

# Dimension One—Personal mastery of mathematics or science content at or beyond the level the applicant is teaching:

- Select a science or mathematics topic or concept that is difficult for students in the class to understand. Provide a brief description of this topic or concept and explain why it may be difficult for students to learn.
- What scientific facts, principles, theories, laws, or concepts are fundamental to understanding this topic, and how is this topic communicated to students?
- How is this topic related to more complex concepts or material that students will encounter in subsequent lessons, grades, or courses?
- What fundamental or basic facts are required for students to master this concept, and what sort of assessments, applications, or problems demonstrate student understanding and readiness to move on to the next level?

#### The narrative for Dimension One must not exceed five pages.

# Dimension Two—Use of instructional methods and strategies that are appropriate for the learning styles of the students and that result in increased student achievement:

- Going back to the topic selected for Dimension One, describe the various instructional approaches you incorporated into the teaching strategy to help students master that topic or concept. When and in what context do you use those strategies, and how is effectiveness in advancing student achievement evaluated?
- How do you assess students' prior knowledge or conceptions related to this topic, and how do you address them in your teaching strategy?
- What techniques are helpful in addressing the varying abilities and skills of students in a single class? How do you challenge the more accomplished students to tackle harder concepts, while ensuring that less accomplished students are not left behind?
- Describe, in general, how you decide when and how to utilize various teaching techniques. How do your lessons meet the needs of all learners (i.e., visual, auditory, and kinesthetic learners)?

#### The narrative for Dimension Two must not exceed five pages.

# Dimension Three—Effective use of student assessment tools to evaluate, monitor, and improve student achievement:

- Describe how you assess student learning and achievement throughout a given activity as well as through a given school year and possibly even beyond.
- Identify and explain your rationale for each of the assessment tools utilized—these should include empirical, quantitative assessments such as classroom-based exams or quizzes; diagnostic tests; state assessments, or national assessments such as standardized tests; Advanced Placement exams; International Baccalaureate scores; or ACT/SAT scores. You may also describe qualitative assessments utilized to assess student learning, such as projects, presentations, or other activities, but it is imperative that at least some of the assessment tools described are quantitative in nature. It is also acceptable to describe the use of other performance data, such as changes in student attitudes, behavior, or participation; increases in the number of students enrolling in and completing higher level mathematics or science courses; or student participation in state, local, or national competitions such as science fairs, the National Science Bowl, or the Mathematics Olympiad. Overall, you must provide evidence of your teaching effectiveness as measured by student achievement.

#### The narrative for Dimension Three must not exceed four pages.

#### **Dimension Four—Reflective practice to improve instructional delivery and student outcomes:**

- Describe how you use reflective practices to improve classroom instruction and to ensure that students are progressing in achievement and performance. How does your reflective practice help you assess whether or not a particular lesson or instructional approach is effective?
- Provide examples of how reflection on past classroom teaching and related activities has led to changes in the way that you have or will present these lessons or would design these activities in the future. Provide examples of lessons or activities that you have improved over time as a result of reflection on the strengths and weaknesses of the activity or on the outcomes of student assessments.
- Describe how reflection has helped you identify areas in which you need additional professional development or content knowledge, and discuss how you have or will acquire that additional knowledge or skills.
- Now reflect upon the lesson presented in Part A of the video. What do you believe were the most successful aspects of the instructional activities presented in the video and why? What were the least successful elements of Part A of the video, and what would you do differently next time to improve student learning?

#### The narrative for Dimension Four must not exceed four pages.

# Dimension Five—Participation in professional development activities either to improve your own knowledge and skills or to provide mentorship, instruction, or support to other teachers who are participants in such programs:

- Describe the ways in which you developed and continue to expand your own background in mathematics or science. This could include classes taken while in college, graduate school, or through continuing education programs; personal study; original research; and participation in an internship, volunteer, or employment experience outside of the classroom that is applicable to your role as a mathematics or science educator.
- Explain how your professional growth (e.g., through courses, workshops, seminars, summer institutes, research experiences, independent study, or outside volunteer or employment opportunities) has helped you improve your content knowledge and pedagogical skills in a way that has resulted in improved student achievement. In addition, describe ways in which you have provided support, mentorship, or instruction to other teachers (or student teachers) to help them improve their classroom performance and student outcomes.
- Finally, describe ways in which you contribute to student learning and achievement outside of the classroom, through activities such as before- or after-school tutoring, extracurricular programs (including those outside of mathematics or science), guiding independent research experiences for students, or mentoring students.

#### The narrative for Dimension Five must not exceed two pages.

#### **III: VIDEO COMPONENT**

#### Video Submission

In addition to the narrative, you must submit a video in which the state and national selection committees can clearly see the interactions between you and your students, and in which student learning, as a result of the instructional activities, is evident. The video, which will consist of one mandatory part and may include one optional part, must be submitted as described below and may not exceed 60 minutes.

#### Part A

For the first part of the video, you will need to videotape a single classroom lesson or experience. It must support the difficult concept or topic discussed in your narrative for Dimension One of Outstanding Teaching. This part of the video must feature continuous footage, **unedited and devoid of any stopping and restarting of the camera**, and must not exceed 30 minutes. The state and national selection committees will use this video to evaluate your teaching effectiveness by observing student behavior, responses, and interactions during the featured lesson or activity. For that reason, the video frame should not focus on the teacher but instead should clearly show the students' faces and their actions and interactions during the lesson.

In evaluating Part A of the video, state and national selection committees will look for evidence of the following:

- Your depth of content knowledge as demonstrated by the accuracy of explanations provided and connections to material students already know.
- Your ability to engage students and maintain their interest in the lesson or activity.
- Your ability to employ appropriate instructional methods, which may include the use of lecture, instructional technology, demonstrations, hands-on activities, and group assignments.
- Students' ability to ask and answer questions or participate in discussions or demonstrations that illustrate their understanding of the concepts being presented.

#### Part B

The second part of the video is optional. It provides you with an opportunity to demonstrate teaching effectiveness beyond the continuous lesson captured in Part A. For example, Part B of the video could include excerpts of students engaged in field activities, student projects or presentations, extracurricular activities, or other relevant activities such as your participation in or leadership of professional development programs, courses, or activities that support the major topic selected for this application. Part B must not exceed 30 minutes, and each excerpt should be preceded by a brief explanation of the context in which this activity took place and the participants involved.

All responses submitted via video must be on a single DVD or videotape. The video must be of sufficient quality so that students' faces are visible and voices are audible. The video should display a minute counter, and whenever the video is referenced in the narrative responses to the Dimensions of Outstanding Teaching, a specific counter reference should be provided. The video must adhere to all district or school requirements and guidelines for parental release or student permission related to classroom videotaping.

You should keep the master video and submit **two copies** of the video with the application. For the 2007 competition, **several states have agreed to allow the video to be submitted on either DVD or VHS format** (see participating states at <u>http://www.paemst.org</u>). **For all other states and jurisdictions, the video must be submitted in standard VHS format.** All video submissions—DVD or VHS—must be labeled with your name, school, state, period of time covered in the application, grade level of students, and major topic and targeted concepts selected for this application.

# Scoring of the Application

Your application will be scored in the following manner. Each element of each Dimension of Outstanding Teaching will be rated using a four-point scale. The sum of the scores within each Dimension will then be multiplied by a weighting factor, as indicated below, to determine the final Dimension score. Finally, the sum of all of the Dimension scores will serve as your final score.

#### The four-point scale is as follows:

- 4: The applicant provides specific evidence that demonstrates mastery or exceptional performance in this area.
- 3: The applicant provides general evidence that demonstrates outstanding skills, knowledge, or performance in this area.
- 2: The applicant provides partial evidence of skills and knowledge or performance in this area, but some weaknesses are apparent.
- 1: The applicant provides limited evidence of knowledge or skills in this area.

#### **Possible score for each Dimension**:

Dimension One	Weighting factor = $2$	$4 \times 4 \times 2 = 32$ points
Dimension Two	Weighting factor = $2$	$4 \ge 4 \ge 32$ points
Dimension Three	Weighting factor = $4$	$2 \times 4 \times 4 = 32$ points
Dimension Four	Weighting factor = $1$	$4 \ge 4 \ge 1 = 16$ points
Dimension Five	Weighting factor = $1$	$3 \ge 4 \ge 12$ points

Total Score = 124 points

## **Instructions for Submission**

Please follow all of the general and specific instructions carefully and make sure all required components are included in the submission. Failure to do so will result in disqualification of the application.

Please note: The completed application package must include an original and five copies of the forms and all written materials as well as two complete tapes or disks of the lessons illustrating talent in teaching and evidence of student progress. A two-page résumé that outlines professional growth over the last 5 years should also be included in the application.

#### **General instructions**

- Use staples and paper clips to compile and secure the original application and the five identical copies.
- Do not use folders, notebooks, or report covers.
- Adhere to all formatting instructions.
- Submit a DVD **only if your state permits it.** Your application may be disqualified if your state has not agreed to participate in the DVD option. See **http://www.paemst.org** for a list of participating states.

Please note: Videos submitted as part of the application process will be used throughout the PAEMST selection process (including application review training) and could be used to promote excellence in science and mathematics teaching.

• The completed applications, postmarked by **May 1, 2007**, must be submitted to your state coordinator. For information on how to contact your state coordinator, please visit the PAEMST Web site at <a href="http://www.paemst.org">http://www.paemst.org</a>.

#### **Specific instructions**

**Nomination form**—Six copies (some nominees may not be able to obtain the original from the person who nominated them).

**Confirmation of employment letter**—On school or district letterhead, signed and dated, from a principal or other appropriate district personnel, original and five copies. If appropriate, this letter may also serve as one of the three required letters of recommendation.

**Three letters of recommendation**—From parents, colleagues, administrators, or others who can attest to the teacher's positive impact on student achievement.

Teacher information form—Signed and dated, original and five copies.

Résumé—Two pages (not included in the 35 pages).

**Responses to the five Dimensions**—Include supporting documents as described under each Dimension.

# **PAEMST Application Teacher Information Form**

Check One: Although some		Grades 7–12 Mathematics hers teach both mathematics and science, for the purpose of		Grades 7–12 Science	
				ed. Do <b>not</b> check both categories.	
First Name:		Middle Name(s):		Last Name:	
		Alternativ			
Home Address	8:				
	City:		State:	Zip:	
Home Telepho	one:				
Mobile Phone:					
School Name:					
School Addres	s:				
	City:		State:	Zip:	
School Teleph	one:				
School Fax:					
Backup Conta First Name:	ct Person	Middle Name(s):		Last Name:	
E-Mail Addres	SS:	Alterna	tive E-Mail Addres	s:	
Home Telepho	one:				
Number of Ye	ars of Teaching Ex	perience in Mathema	tics/Science Prior to	o the 2006—2007 School Year:	
Number of Ye	ars in Current Pos	ition:			
Area(s) of Cer	tification:				
Describe curre	ent teaching assign	ment, including grade	e level, courses taug	ht, and weekly teaching schedule.	
School Data:				ict Enrollment:	
	Check One:	Public	Private	Charter	
	Check One:	Urban	Suburban	Rural	

Indicate student population percentage:				
% American Indian or Alaska Native	<u>%</u> Native Hawaiian or other Pacific Islander			
% Asian	% White			
% Black or African American	% More than one race reported			
% Hispanic or Latin American	% Do not know			
Provide the following information about the vide	otaped class:			
Number of Students Subject of the Class _				
Indicate student population percentage:				
<u>%</u> American Indian or Alaska Native	% Native Hawaiian or other Pacific Islander			
% Asian	% White			
% Black or African American	% More than one race reported			
% Hispanic or Latin American	% Do not know			
Provide the following information about your pri	incipal/administrator:			
Name:	Title:			
Institution Name:				
Address:				
City:	State: Zip:			
E-Mail Address:				
Provide the following information about your loc	cal superintendent or head of schools:			
Name:	Title:			
School District:				
Address:				
City:	State: Zip:			
Applicant Signature	Date			
Completed applications, <b>postmarked by May 1</b> information on how to contact your state coordin http://www.paemst.org	<b>1, 2007</b> , must be submitted to your state coordinator. For nator, please visit the PAEMST Web site at			

NSF Form 1381 (9/02, Revised)

# **Privacy Act and Public Burden Statements**

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to your institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies needing information as part of the review process or in order to coordinate programs; and to another Federal agency, court or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See System of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of your receiving an award.

Pursuant to 5 CFR 1320.5(b), an agency may not conduct or sponsor and a person is not required to respond to an information collection unless it displays a valid OMB control number. The OMB control number for this collection is 3145-0058. Public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Suzanne Plimpton, Reports Clearance Officer, Information Dissemination Branch, Division of Administrative Services, National Science Foundation, Arlington, VA 22230, or to Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for National Science Foundation (3145-0058), 725 17<sup>th</sup> Street, NW., Room 10235, Washington, DC 20503.

# Information about Candidates for Presidential Awards for Excellence in Mathematics and Science Teaching

Submit ONE copy of this form with your application packet. Submission of this information is voluntary and is not a precondition of award. The information will not be disclosed to external peer reviewers. THIS FORM SHOULD NOT BE ATTACHED TO ANY OTHER DOCUMENT IN YOUR APPLICATION PACKET AS THIS MAY COMPROMISE THE CONFIDENTIALITY OF THE INFORMATION.

Candidate's Name:	 		
Gender:	Male		Female
Ethnicity: (Choose one response)	Hispanic or Latino		Not Hispanic or Latino
Race: (Select one or more)	American Indian or Alaska M Asian Black or African American Native Hawaiian or Other Pa White		
Disability Status: (Select one or more)	Hearing Impairment Visual Impairment Mobility/Orthopedic Impair Other: None	nent	
Citizenship: (Choose one)	U.S. Citizen Permanent Resident Other Non-U.S. Citizen		
Check here if you do not wish to provide the above information (excluding Candidate's			

name):

#### **Ethnicity Definition:**

Hispanic or Latino. A person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race.

#### **Race Definitions:**

American Indian or Alaska Native. A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

Asian. A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

Black or African American. A person having origins in any of the black racial groups of Africa.

Native Hawaiian or Other Pacific Islander. A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

#### WHY THIS INFORMATION IS BEING REQUESTED:

The Federal Government has a continuing commitment to monitor the operation of its review and award processes to identify and address any inequities based on gender, race, ethnicity, or disability of its proposed candidates for Presidential Awards for Excellence in Mathematics and Science Teaching. To gather information needed for this important task, the candidate should submit a single copy of this form with his/her application materials. Submission of the requested information is voluntary and will not affect the candidate's eligibility for an award. However, information not submitted will seriously undermine the statistical validity, and therefore the usefulness, of information received from others. Any individual not wishing to submit some or all the information should check the box provided for this purpose. (The exception is the candidate's name.) Collection of this information is authorized by the NSF Act of 1950, as amended, 42 U.S.C. 1861, et seq. Demographic data allows us to gauge whether our programs and other opportunities in science and technology are fairly reaching and benefiting everyone regardless of demographic category, and to ensure that those in under-represented groups have the same knowledge of and access to programs, meetings, vacancies, and other research and educational opportunities as everyone else. The information will be held closely. Information from the system may be merged with other computer files in order to carry out statistical studies. Disclosure may be made for this purpose to NSF contractors and collaborating researchers, other Government agencies, and qualified research institutions and their staffs. The results of such studies are statistical in nature and do not identify individuals. The information will be added to the NSF Fellowships and Other Awards File, which covers individuals applying or nominated for and/or receiving NSF support, either individually or through an academic institution, including fellowships or awards of various types. See System of Records, NSF-12, "Fellowships and Other Awards," 63 Federal Register 265 (January 5, 1998). NSF Form 1225 (10/99)