



National Science Foundation

Graduate Research Fellowships

Guidelines for Submission of Applications

Program Year 2002

**Deadline for entering the
competition:**

November 7, 2001

Information available from:

NSF Graduate Research
Fellowship Program
Oak Ridge Associated Universities
P.O. Box 3010
Oak Ridge, TN 37831-3010
Telephone: (865) 241-4300

Electronic Mail: nsfgrfp@orau.gov

Web Site:

<http://www.orau.org/nsf/nsffel.htm>

SUMMARY OF PROGRAM REQUIREMENTS

GENERAL INFORMATION

Program Title: Graduate Research Fellowship Program (GRFP)

Synopsis of Program: The National Science Foundation (NSF) aims to ensure the vitality of the human resource base of science, mathematics, and engineering in the United States and to reinforce its diversity by offering approximately 900 graduate fellowships each year, including awards for women in engineering and computer and information science. Fellowships provide three years of support for graduate study leading to research-based master's or doctoral degrees in the fields of science, mathematics, and engineering supported by the NSF and are intended for students in the early stages of their graduate study.

Applicable Catalog of Federal Domestic Assistance (CFDA) No.:

47.076, Education and Human Resources.

ELIGIBILITY INFORMATION

- **Citizenship:** Applicants must be United States citizens or nationals, or permanent resident aliens of the United States.
- **Field and Degree Program:** Fellowships are awarded for graduate study in fields supported by the NSF, including the mathematical, physical, biological, behavioral and social sciences; engineering; the history of science and the philosophy of science; and for research-based PhD degrees in science education.
- **Earned Graduate Study:** Fellowships are intended for individuals in the early stages of their graduate study. In most cases, an individual has three opportunities to apply: during the senior year of college, the first year of graduate school, and the beginning of the second year of graduate school.

AWARD INFORMATION

- **Anticipated Type of Award:** Fellowships provide three years of support that may be used over a five-year period.
- **Estimated Number of Awards:** 900
- **Amount of funds available:** \$20,500 stipend for a 12-month tenure plus \$10,500 cost-of-education allowance per tenure year pending availability of funds
- **Anticipated date of award:** New fellowships to be offered in March 2002

APPLICATION PREPARATION AND SUBMISSION INSTRUCTIONS

A. *Application Preparation Instructions*

Complete instructions are outlined in these *Guidelines for Submission of Applications*.

B. *FastLane Requirements*

- Submission via NSF's FastLane GRFP process is expected.
- FastLane Technical Questions can be directed to:
FastLane Help Desk: 1-800-673-6188; felapp@nsf.gov

C. *Application Deadline*

Electronic applications must be submitted via FastLane by 5:00 p.m. in the applicant's local time zone on November 7, 2001. Applications submitted via hard copy must be postmarked or delivered in person by November 7, 2001.

PROPOSAL REVIEW INFORMATION

Merit Review Criteria: NSF Merit Review Criteria apply.

AWARD ADMINISTRATION INFORMATION

Award Conditions: Outlined in *Information for Graduate Research Fellows* online booklet
<http://www.nsf.gov/cgi-bin/getpub?nsf0194>.

NATIONAL SCIENCE FOUNDATION GRADUATE RESEARCH FELLOWSHIPS

ACADEMIC YEAR 2002-2003

The National Science Foundation (NSF) aims to ensure the vitality of the human resource base of science, mathematics, and engineering in the United States and to reinforce its diversity. To that end in March 2002, the NSF will award approximately 900 new three-year Graduate Fellowships, including awards offered for women in engineering and computer and information science.¹ NSF Fellows are expected to contribute significantly to research, teaching, and industrial applications in science, mathematics, and engineering. These contributions, in turn, will broadly impact society and the community.

As part of its mission to promote the progress of science, mathematics, and engineering, NSF supports individuals and groups to engage in activities that ensure a technologically literate populace with the understanding and skills needed for the workforce of the twenty-first century as well as fully trained scientists and engineers for the present and the future. In forming its investment strategy for education and human resource development, NSF's aim is to ensure that all members of society have real opportunity to succeed in science and technology so that the Nation can draw upon the strength and creativity that the diversity in our society has to offer.

The Foundation welcomes applications from all qualified science, mathematics, and engineering students and strongly encourages women, minorities, and persons with disabilities to compete fully in this program.

ELIGIBILITY

All applications will be reviewed for eligibility using the criteria described in the sections below. In some cases this review continues through the disciplinary panels convened in February.

Citizenship

NSF Graduate Fellowships are open only to individuals who are, at the time of application, citizens or nationals of the United States² or permanent resident aliens of the United States.

Field, Degree Program, and Research Topics

Fellowships are awarded for graduate study leading to research-based master's or doctoral degrees in the fields of science, mathematics, and engineering supported by the National Science Foundation listed later in these *Guidelines*. Awards are also made for work toward a research-based PhD in science education that requires a science competence comparable to that for PhD candidates in scientific disciplines. Research in bioengineering with diagnosis or treatment-related goals that applies engineering principles to problems

in biology and medicine while advancing engineering knowledge is eligible for support. Bioengineering research to aid persons with disabilities is also eligible.

Support is not provided for study in clinical, counseling, business, or management fields; in other education programs of any kind; or in history (except in history of science) or social work; for work in medical, dental, law, public health, or practice-oriented professional degree programs; or in joint science-professional degree programs such as MD/PhD and JD/PhD programs. Support is not provided for clinical research or for research with a focus on disease, especially applied research on the diagnosis or treatment of physical or mental disease, abnormality or malfunction in humans or animals. Research involving animal models of such conditions, the development or testing of drugs, or other procedures for their treatment is also not eligible for support. Basic research in fields supported by NSF (listed later in these *Guidelines*) is usually eligible notwithstanding the fact that it may lead to long-term disease-related implications.

Earned Graduate Study

NSF Graduate Fellowships are intended for individuals in the early stages of their graduate study in science, mathematics, or engineering. In most cases an individual has three opportunities to apply: during the senior year of college, the first year of graduate school, and the beginning of the second year of graduate school. Individuals who have completed no more than one full year of graduate study (or the equivalent in part-time study³) are eligible. Typically, individuals who started full-time graduate study in August/September 2000, and who have earned no prior graduate credit will be considered to have completed no more than one full year when applying by November 2001.

Most individuals who have completed more than one full year of graduate study (or the equivalent in part-time study³) are too advanced to be eligible for this program. However, some individuals with more than a year of graduate study, including some holding a master's degree in an NSF-supported field, are eligible. The following two questions are asked when assessing the eligibility of applicants with more than a year of graduate study in NSF-supported fields. (1) Is the applicant essentially starting over? (2) Will the applicant be no further along than a student who had completed only one year in the proposed program? An applicant with more than one year of graduate study in NSF-supported fields must address these questions in Question 19 of the *Application Form*. This response will be considered along with the entire application in evaluating eligibility.

There are three principal reasons why an individual with more than a year of graduate study in an NSF-supported field might be eligible:

- 1.) A significant change of field is proposed. Whether a given program constitutes a substantial field change is a subjective judgment. Similarities between the proposed program of study and the previous study or research are examined in detail. Changes within a given discipline, such as from

1 Funding for these additional awards is provided by the Directorate for Computer and Information Science and Engineering, the Directorate for Engineering, and the Directorate for Education and Human Resources.

2 The term "national of the United States" designates a citizen of the United States or a native resident of a commonwealth or territory of the United States, such as American Samoa, Guam, Puerto Rico, U.S. Virgin Islands, or the Northern Mariana Islands. It does not refer to a citizen of another country who has applied for United States citizenship.

3 For eligibility purposes assume that 9 semester hours of part-time study is equal to a full-time semester, and that 6 semester hours of part-time study is equal to a summer session. Thus, a student with more than 24 semester hours of graduate credit earned subsequent to a bachelor's degree would be, for eligibility purposes, viewed as having completed more than the equivalent of one year of full-time graduate study.

topology to geometry in mathematics, are seldom sufficient. Changes from quite distinct fields, for example, from biology to economics, are generally considered to be sufficient. When the change is between related fields, such as from biology to ecology or from mechanical engineering to bio-medical engineering, the decision usually hinges on the path the student has followed. If there is considerable similarity in the research and the coursework between the previous study and the proposed study, such changes are not enough to make an applicant eligible.

- 2.) An interruption in studies is demonstrated. Applicants who have interrupted their graduate studies (for example, to gain work experience or for family or medical reasons) may be eligible if the interruption is for a period of more than two years. However, when the applicant has been engaged in activities (professional or academic) related to the proposed research, then the interruption by itself will typically not be enough to make a student with more than a year of graduate study eligible.
- 3.) A change in university is proposed. If an applicant completes some graduate study at one university and then enrolls in a similar field in a different university, he or she must be viewed as being no further along than a student who has completed one full year at the proposed university in order to be considered eligible. That applicant must make a convincing case that little of the earned coursework would transfer and also that there is a substantial change in research focus.

There are two situations in which applicants with graduate study completed are always ineligible:

- Those who earned a PhD in science, mathematics or engineering, or any medical degree, such as the MD, DDS, or DVM, after October 1, 1997.
- Those who have already received and held tenure as an NSF Graduate Research Fellow.

Eligibility for the Women in Engineering and Computer and Information Science Awards

The Women in Engineering and Computer and Information Science (WECS) awards are for women who intend to pursue graduate degrees in Engineering or Computer and Information Science and Engineering. All women who apply in fields listed under “Engineering” or “Computer and Information Science and Engineering” later in these *Guidelines* will be considered for a WECS award. Other eligibility criteria are the same as for applicants in other fields.

EVALUATION OF APPLICATIONS

Each applicant’s qualifications will be reviewed by disciplinary panels of scientists, mathematicians, and engineers convened in February 2002 for NSF by Oak Ridge Associated Universities (ORAU). Applications are assigned to panels based on the applicant’s chosen field(s) of study and are evaluated on the basis of all available information. (The rating sheet can be viewed at <http://www.orau.org/>

[nsf/nsffel.htm](#).) In considering applications, reviewers are asked to address two questions that are the basis of NSF’s merit review criteria: (1) What is the intellectual merit of the applicant? and (2) What are the broader impacts of supporting the individual’s graduate study?

Intellectual Merit Criterion

Intellectual merit includes intellectual ability and other accepted prerequisites for scholarly scientific study, such as the ability (1) to work as a member of a team as well as independently; (2) to communicate; and (3) to plan and conduct research. Panelists are instructed to consider: the strength of the academic record, the proposed plan of research, the description of previous research experience, the appropriateness of the choice of references and the extent to which they indicate merit, Graduate Record Examinations (GRE) General and Subject Tests scores, and the appropriateness of the choice of institution for fellowship tenure relative to the proposed plan of research.

Broader Impacts Criterion

Broader impacts of supporting an applicant’s graduate study may include contributions to community, both social and scholarly. In reviewing an applicant’s merit, reviewers consider unique characteristics of each applicant’s background, including personal, professional, and educational experiences. As in all NSF programs, valuing diversity and the integration of research and education are important elements of the merit review criteria.

Integration of Research and Education

One of the principal strategies in support of NSF’s goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learner perspectives. Applicants should address this issue in their written statement(s) to provide reviewers with the information necessary to respond fully to both NSF merit review criteria.

Integrating Diversity into NSF Programs, Projects, and Activities

Broadening opportunities and enabling the participation of all citizens—women and men, underrepresented minorities, and persons with disabilities—are essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports. Applicants should address this issue in their written statement(s) to provide reviewers with the information necessary to respond fully to both NSF merit review criteria.

SELECTION OF AWARDEES

The review panels’ recommendations for fellowships will be further reviewed by NSF staff for conformance with Foundation policy.

Awards will be made by the NSF on the basis of merit in accordance with Section 10 of the National Science Foundation Act of 1950, as amended. Selection of awardees will be in the merit order established by the review panels; other criteria such as geographical region, discipline, or other factors determined to be consistent with policy and legislative intent will be used to select among applications of substantially equal merit (as determined by the merit review process).

The NSF will publish lists of awardees and Honorable Mention recipients on the Graduate Research Fellowship Program web site at: <http://www.nsf.gov/grfp> in late March 2002. All applicants will be notified by letter of the outcome of their applications. Those applicants who merit receiving Graduate Research Fellowships, but to whom awards cannot be made because funds are not available, will be accorded Honorable Mention. Honorable Mention in the NSF Graduate Research Fellowship Program is considered a significant academic achievement nationwide. All offers and support levels referenced in these *Guidelines* are subject to availability of funds.

CONDITIONS OF AWARDS

All fellowship awards are made subject to the provisions contained in the *Information for Graduate Research Fellows* online booklet (<http://www.nsf.gov/cgi-bin/getpub?nsf0194>), including any subsequent amendments. Only the most basic information contained in that booklet is presented in these *Guidelines*. Three certifications⁴ must, by law, be made before the NSF can authorize funds for a fellowship award.

Graduate Programs

Fellows may choose any appropriate, accredited, non-profit United States institution or appropriate international institution of higher education offering advanced degrees in science, mathematics, or engineering.

Fellows are required to engage in full-time programs leading to graduate degrees in disciplines supported by NSF. Acknowledging the importance of integrating research and education, the NSF permits institutions to assign Fellows to appropriate research and teaching positions that will contribute to the progress of the Fellow toward an advanced degree. Fellows are encouraged to determine policies regarding any such required service before enrolling in any particular institution.

After an award is made, a major change in course of study requires prior NSF approval. The availability of the second and third years of a three-year award is contingent upon certification to NSF by the fellowship institution that the Fellow is making satisfactory academic progress toward an advanced degree in the approved field of study.

Stipend and Allowances

The NSF fellowship stipend during 2002-2003 will be \$20,500 for a 12-month tenure, prorated monthly at \$1,708 for lesser periods. There is no dependency allowance. At its discretion, each fellowship institution may supplement a Fellow's stipend from institutional funds in such amounts as are in accordance with the policies of the fellowship institution.

In addition to the funds for stipend payments, the NSF provides the fellowship institution, on behalf of each Fellow, a cost-of-education allowance of \$10,500 per tenure year. During tenure, Fellows at U.S. institutions will be exempt from paying tuition and fees normally charged to students of similar academic standing, unless such charges are optional or are refundable.

At international institutions, all tuition and assessed nonrefundable fees will be paid by the Fellow, with reimbursement by the NSF, up to a maximum of \$10,500 per fellowship year.

A one-time International Research Travel Allowance of \$1,000 is available to Fellows who have arranged to conduct full-time advanced study or research at appropriate international sites for at least three continuous months. The activities must contribute to the Fellow's advanced degree objectives and must be approved by the Fellow's institution. Once a Fellow has begun NSF fellowship tenure, this travel allowance may be used at any appropriate time that travel is initiated within the five-year fellowship period.

Except for supplementation as explained above, a Fellow may not accept simultaneous remuneration from another major fellowship, assistantship, scholarship or similar award. Under Section 178(a) of Title 38, U.S. Code, educational benefits from the Department of Veterans Affairs may be received concurrently with NSF support.

Tenure

New fellowships to be offered in March 2002 will be for maximum tenure periods of three years usable over a five-year period. Recipients may begin fellowship tenure in the summer or fall term. Tenure must be completed before the beginning of the 2007 fall term. Normal tenure for a Fellow is 9 to 12 months for each fellowship year; funds for unutilized months are forfeited. A Fellow may reserve any two years over the five-year period to use an alternative means of support or to engage in activities other than graduate study. No individual will be eligible for more than three years of NSF Graduate Research Fellowship support.

OTHER OPPORTUNITIES FOR FELLOWSHIP AWARDEES AND HONORABLE MENTION RECIPIENTS

All fellowship awardees and Honorable Mention recipients may apply to use the resources at a Partnership for Advanced Computational Infrastructure (PACI) facility.

Facilitation Awards for Scientists and Engineers with Disabilities (FASSED) provide funding for special assistance or equipment to enable persons with disabilities (students and faculty) to work on NSF-supported projects. All fellowship awardees and Honorable Mention recipients who have disabilities may apply for assistance by contacting: FASSED c/o Graduate Research Fellowship Program, National Science Foundation, 4201 Wilson Boulevard - Room 907, Arlington, VA 22230. See the FASSED program announcement at <http://www.nsf.gov/cgi-bin/getpub?nsf9154>, or contact the program coordinator at (703) 292-8636.

⁴ These concern: 1) controlled substances; 2) delinquency on Federal debt; and 3) debarment and suspension from certain transactions with Federal, State, or local governments.

These and other opportunities are explained in the “Additional Fellowship Provisions” section of the *Information for Graduate Research Fellows* online booklet (<http://www.nsf.gov/cgi-bin/getpub?nsf0194>).

GUIDELINES FOR APPLYING

Individuals should read carefully this document before attempting to complete any application forms. Inquiries concerning the application process should be directed to Oak Ridge Associated Universities via e-mail or telephone.

All applicants are expected to use NSF’s FastLane Graduate Research Fellowship Program (GRFP) process: <http://www.fastlane.nsf.gov>. With Internet access and a supported World Wide Web browser, an applicant can submit an application electronically using this secure process. With information provided by the applicant, references may submit a *Reference Report Form* via FastLane; reference reports may also be submitted via postal mail. Security is provided to ensure that both applications and *Reference Report Forms* can be accessed only by authorized persons.

To access the NSF FastLane GRFP process, click on the Graduate Research Fellowships link on the FastLane Home Page. You will see instructions on how to use the FastLane GRFP process. Applicants should carefully review all information on the FastLane GRFP process for detailed instructions that may not be included in this publication.

For questions concerning the FastLane GRFP process, please contact the FastLane Graduate Research Fellowship support staff at electronic mail: felapp@nsf.gov or phone: 1-800-673-6188.

For individuals who do not have access to the Internet, see letters b and c under “Application Forms Retrieval and Submission” later in these *Guidelines*.

Graduate Record Examinations

General Test

All NSF Graduate Research Fellowship applicants are recommended to have scores from the GRE General Test to support the review of their application. If the applicant will not have GRE General Test scores earned since October 1, 1996, the applicant should notify ORAU at the time of submission of the application. If you plan to take the GRE General Test in support of your application, you should make arrangements to take it no later than January 5, 2002. Scores from tests taken after January 5, 2002 will not be accepted.

Subject Test

All applicants are recommended to have scores from the Subject Test in their proposed field of graduate study, if a test is offered. The Educational Testing Service (ETS) offers Subject Tests in the following NSF-supported fields: Biochemistry, Cell and Molecular Biology; Biology; Chemistry; Computer Science; Mathematics; Physics; and Psychology. If the applicant’s proposed field of

graduate study is listed above and the applicant will not have Subject Test scores earned since October 1, 1996, the applicant should notify ORAU at the time of submission of the application. If you plan to take a Subject Test in support of your application, you should make arrangements to take it no later than December 8, 2001.

How to Obtain GRE Information for Test Registration

You are responsible for obtaining your own *GRE Information and Registration Bulletin* and registration form either on your campus, or directly from the Educational Testing Service, P.O. Box 6000, Princeton, New Jersey 08541-6000, telephone (609) 771-7670, fax (609) 771-7906 or Internet <http://www.gre.org>. Complete test registration instructions are given in the *GRE Information and Registration Bulletin* and on the web site.

Reporting of GRE Scores

Only GRE scores from tests taken between October 1, 1996 and January 5, 2002 will be accepted for the 2002-2003 NSF Graduate Research Fellowship competition. Applicants should not request score reports from ETS for their fellowship application and should not submit scores directly to ORAU. There is not an active “Fellowship Sponsor Code” for this program. Under ETS policy, all GRE General and Subject Tests scores in the GRE database from tests administered since October 1, 1996 (and prior to the fellowship application test date cutoff of January 5, 2002) will be reported directly to ORAU. In cases where an applicant for an NSF Fellowship has registered for the GRE using a different name, date of birth, or Social Security number, the applicant should notify ORAU in writing at the time of submission of the application.

Payment of Subject Test Fee

NSF will pay Subject Test registration fees for applicants who register for the December 8, 2001 administration provided that (1) NSF Fellowship application is the primary purpose, and (2) the GRE registration form for the December test has been received at ETS no later than November 2, 2001. The registration form and *Request for Payment of GRE Subject Test Fee* form must be submitted via postal mail (but no payment is required). NSF fee sponsorship cannot be requested using electronic registration.

The following condition is imposed on the reporting of December 8, 2001 GRE Subject Test scores when the test fee is paid by NSF: Prior to May 1, 2002 these scores will be reported only to Oak Ridge Associated Universities for the NSF Graduate Research Fellowship Program, to the fellowship applicant, and to the applicant’s undergraduate institution. Exception: If you are an applicant in the NSF Graduate Research Fellowship Program and an applicant in the Howard Hughes Medical Institute Predoctoral Fellowship Program, your GRE Subject Test score will be reported to both programs and the test fee shared by the National Science Foundation and the Howard Hughes Medical Institute. If you want to have your NSF-funded GRE scores reported elsewhere (e.g., graduate institutions and other fellowship programs) before May 1, 2002, you must make arrangements with ETS to pay the registration and additional score

reporting fees. Note that NSF will be charged for all Subject Test administrations for applicants who submit the *Request for Payment of GRE Subject Test Fee* form, even if the applicant is absent from the test administration.

Application Status

It is the applicant's responsibility to ensure that all materials are received by ORAU; applicants will be notified about a secure web site where they may access application status information.

Applicants should consult the ORAU/NSF web site <http://www.orau.org/nsf/nsffel.htm> throughout the months following the November deadline for current program information and announcements.

Where to Submit Application Materials

- Applications and *Reference Report Forms* should be submitted electronically using FastLane; other supporting materials should be submitted in hard copy via postal mail or special messenger or delivery.

Application materials are not accepted via fax or electronic mail.

- Mailing address:
NSF Graduate Research Fellowship Program
Oak Ridge Associated Universities
P.O. Box 3010
Oak Ridge, TN 37831-3010
- Overnight delivery or courier address:
NSF Graduate Research Fellowship Program
Oak Ridge Associated Universities
702 South Illinois Avenue, Suite B-102
Oak Ridge, TN 37830

DEADLINES

Application Materials

A complete application consists of all the materials listed below, including GRE General and Subject Tests scores. An incomplete application is at a disadvantage in the competition and may not be evaluated.

- November 7, 2001 – Submission Deadline
 - Information Form
 - Application Form
 - Proposed Plan of Research Form
 - Previous Research Experience Form

The application materials listed above must be submitted via FastLane by 5:00 p.m. in the applicant's local time zone. (For individuals who do not have access to the Internet, see the letters b and c under "Application Forms Retrieval and Submission" later in these *Guidelines*.) Late applications will not be accepted.

- November 7, 2001 – Preferred Submission Date
 - Undergraduate GPA Form
 - Official Academic Transcripts (excluding fall 2001)

Undergraduate GPA Forms and transcripts should be submitted in hard copy. These items may be mailed in the same envelope.

- December 6, 2001 – Preferred Submission Date
 - Reference Report Forms (four are expected)

Requests for Reactivation of Official Academic Transcripts and/or Undergraduate GPA Forms

- November 7, 2001 - Submission date for requests for reactivation of Official Academic Transcripts and/or Undergraduate GPA Forms from the 2001 competition. Send requests via electronic mail to nsfgrfp@orau.gov.

Graduate Record Examinations

- November 2, 2001 - Receipt date for GRE registration forms at the ETS for NSF applicants for the December 8, 2001 Subject Test.
- December 8, 2001 - Last date for GRE Subject Test for NSF applicants.
- January 5, 2002 - Last date for GRE General Test for NSF applicants.

Application Forms Retrieval and Submission (Hard Copy Only)

Application forms may be retrieved using the following methods. Note that applications submitted via postal mail must be postmarked or delivered in person to ORAU by November 7, 2001. Applications postmarked or submitted later than November 7, 2001 will not be considered for review.

- a. NSF Web Site: <http://www.nsf.gov/grfp>

Via the Internet, you can download the application forms as either a PDF printable blank form or a Microsoft Word 97 (or newer version) on-line form. To view the PDF forms you must have the Adobe Acrobat Reader installed, which is a free product and can be downloaded at this site. If your browser does not automatically launch the Microsoft Word 97 on-line form, a message will appear to prompt you to save the Word file to a local disk drive.

- b. Information via E-Mail: You can have these *Guidelines for Submission of Applications* and application forms sent to you via electronic mail. Each application form is available in two versions: a PDF printable blank form and a Microsoft Word 97 (or newer version) on-line form.

Send an electronic mail message to: getpub@nsf.gov

Leave the subject line blank. In the body of the message enter:

get nsf01146.htm (for *Guidelines for Submission of Applications*)

get nsf01146.pdf (for *Guidelines for Submission of Applications*)

get fmgfkit.pdf (for PDF Application Forms kit)

get fmgfkit.doc (for Word 97 Application Forms kit)

- c. Printed application forms may be obtained by direct request from:

NSF Graduate Research Fellowship Program

Oak Ridge Associated Universities

P.O. Box 3010, Oak Ridge, TN 37831-3010

or telephone (865) 241-4300

or fax (865) 241-4513

or electronic mail to: nsfgrfp@ora.gov

INSTRUCTIONS FOR COMPLETING A FELLOWSHIP APPLICATION

Instructions for completing all forms are provided in the following sections. The information requested on the application materials is solicited pursuant to the National Science Foundation Act of 1950, as amended. All of the information you supply will be used to determine eligibility, to collate application materials, to assist reviewers in evaluating the merit of applicants, to select NSF Fellows and to administer the NSF fellowships. This information will not be disclosed for any other purpose, except as part of statistical reports in a form that would not allow identification of individual applicants. Failure to provide full and complete information necessary for eligibility determination or for evaluation of qualifications may reduce the possibility of your receiving a fellowship award.

Inventory List:

Use this sheet when submitting your NSF Graduate Research Fellowship application materials via postal mail. List the materials and page count on the form as indicated.

Information Form (NSF Form 289):

The data requested on the *Information Form* is used to facilitate the reporting of your GRE scores, in the analysis and reporting of program demographics, and to contact you. Your responses to the demographic questions are voluntary.

1. **Social Security number.**
2. **Former last name.** List all last names used previously. This will facilitate retrieval of your GRE scores.
3. **List your complete permanent address.** Check if the address is

U.S. (including Puerto Rico, Guam, American Samoa, U.S. Virgin Islands and the Northern Mariana Islands) or international. Do not use APO or FPO addresses, college department addresses, or abbreviated names of streets or cities.

4. **The mailing address** will be used to notify you of the outcome of this year's competition. Check if the address is U.S. (including Puerto Rico, Guam, American Samoa, U.S. Virgin Islands and the Northern Mariana Islands) or international. Notify ORAU immediately of any change in mailing address.
5. **List one telephone number (daytime).**
6. **List one e-mail address.** The e-mail address will be used to notify you of application materials received on your behalf, of eligibility concerns, and for other correspondence through February 2002. It is your responsibility to ensure the accuracy and currency of this information. Notify ORAU immediately of any change in e-mail address.
7. **Date of birth and place of birth.** Check if the location is U.S. (including Puerto Rico, Guam, American Samoa, U.S. Virgin Islands and the Northern Mariana Islands) or international.
8. **Gender.**
9. **List the city and state or country of the high school from which you graduated.** Check if the location is U.S. (including Puerto Rico, Guam, American Samoa, U.S. Virgin Islands and the Northern Mariana Islands) or international. If you received a high school equivalency certificate rather than a diploma, indicate the name of the state through which it was granted.
10. **Use the following descriptions to select your groups.**
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.
11. **All applicants must be citizens or nationals of the United States, or permanent resident aliens of the United States at the time of application.** If you are a permanent resident alien, enter the date your permanent resident status was granted. Indicate country of citizenship if not U.S.
12. **Indicate if you have a disability that limits a major life activity.**

13. **In addition to publishing the names of applicants to whom awards will be offered, NSF also publishes the names of applicants who qualify for honorable mention designation.** See <http://www.nsf.gov/grfp> for previous lists. Honorable Mention in the NSF Graduate Research Fellowship Program is considered a significant achievement nationwide. Failure to respond to this question will be treated as a negative response.
14. **The lists of awardees and honorable mention recipients that NSF publishes are frequently used by universities to recruit graduate students.** To assist those universities in contacting individuals on the lists, NSF publishes mailing addresses. See <http://www.nsf.gov/grfp> for previous lists. Failure to respond to this question will be treated as a negative response.
15. **Indicate how you learned about the program.**
16. **If applying via postal mail, respond to this question regarding FastLane,** NSF's Internet/Web based system for electronic applications. Your answer to the question is for administrative use. In the future NSF intends to require submission of applications using FastLane.

Application Form (NSF Form 289):

1. **Major field of specialization:** Select only one major field. Refer to the "NSF-Supported Fields of Specialization" list in the back of these *Guidelines*. (The major field will be automatically selected for FastLane applicants based on selection of specialized field.)
2. **Specialized field(s) within major field:** From the "NSF-Supported Fields of Specialization" list, select your proposed field and enter the code number and name on the designated line. If your field is not specified, list the appropriate "other" code number and enter the name of your specialized field.
3. **Multidisciplinary programs:** If your graduate program is multidisciplinary, indicate your primary field of study and the percent of effort in your overall program. Likewise, indicate your other or secondary fields and the percent of effort. Refer to the "NSF-Supported Fields of Specialization" list. If a field is not contained in this list, please list the field and the percent of effort.
4. **Degree goal:** Enter the name of the highest level degree toward which you expect to work while on your proposed fellowship tenure and the field. For example, if two years of your fellowship tenure will be spent earning a master's degree and one year of your tenure in a PhD program, list the PhD as your ultimate degree goal.
5. **Proposed graduate institution:** Indicate your first choice of a graduate institution. Reviewers consider the appropriateness of the choice in reviewing your application. You need not have been accepted at this institution before listing its name. If, after submitting the application, you decide to change the institution you wish to attend, notify ORAU immediately. Also list your proposed department within the institution, the city where the institution is located, and the state or country. Do not abbreviate.
6. **Baccalaureate institution:** List the institution from which you will receive or have received your bachelor's degree. If you have or will have more than one bachelor's degree, list the institution of your most recent science or engineering degree; if no science or engineering degree, list the institution of your most recent bachelor's degree. Also list the degree, the year of completion, the city where the institution is located, and the state or country.
7. **Colleges or universities attended:** Starting with the current or most recent college/university (including its location), indicate the beginning and ending dates of attendance, degree awarded or expected and date, and the major field of study. For dates, use the "mm/yyyy" format.
8. **Current enrollment (as of fall 2001):** If currently enrolled in a college or university, indicate whether full-time or part-time. Also indicate the level (undergraduate or graduate). Indicate the institution where you are currently enrolled along with the city and state or country.
9. **Five-year Program:** Indicate if you are or have been enrolled in a five-year joint baccalaureate-master's degree program.
Four-year Program: Indicate if you are or have been enrolled in a four-year joint baccalaureate-master's degree program.
10. **Completed graduate courses in any field since receipt of your bachelor's degree:** List the institution, department, dates attended, and number of graduate hours (including individual courses, research, seminars, and independent study) completed since receipt of your bachelor's degree. For the dates, use the "mm/yyyy" format.
11. **Information regarding the GRE test(s)** you took or plan to take will facilitate reporting of your scores by ETS for purposes of evaluation in this program. (See the passage on "Graduate Record Examinations" in these *Guidelines*.) Indicate whether you have or have not taken the GRE General Test and indicate the date on which you took or plan to take the test. Indicate whether you have or have not taken a GRE Subject Test, provide the date on which you took or plan to take the test and the field. For the dates, use the "mm/yyyy" format. If you will not have General Test and/or Subject Test scores earned since October 1, 1996, send an explanation to ORAU via postal or electronic mail (or via the comment box available to FastLane applicants).
12. **Individuals chosen to submit Reference Report Forms:** Choose individuals, preferably faculty members in science or engineering fields, whose knowledge of your academic and/or professional experience and ability is current. See "Reference Report Form" later in these instructions for further information.
13. **List your native language.**
14. **List up to five fellowships, scholarships, teaching and work experiences** relevant to your field held since entering college/university. Begin with the most recent.

15. **List significant academic honors** you have received relevant to your major field of study.
16. **Describe your personal, professional, or educational experiences or situations.** Review the instructions for the *Previous Research Experience Form* to avoid duplicating information. Type single-spaced using 10-point font size or larger. There is a 1-page limit.
17. **Describe your experiences in the following:** Integrating research and education (for example, participating in and encouraging discovery at various levels); advancing diversity in science (for example, contributing to the participation of underrepresented groups); contributing to your community (both scholarly and social). Type single-spaced using 10-point font size or larger. There is a 1-page limit.
18. **Mark the choice that most appropriately describes your current status.** If you have been a part-time graduate student, assume that 9 semester hours of part-time study is equal to a full-time semester, and that 6 semester hours of part-time study is equal to a summer session. Thus, a student with more than 24 hours of graduate credit earned subsequent to a bachelor's degree would be viewed as having completed more than the equivalent of one year of full-time graduate study.
19. **If you have completed more than one year of full-time graduate study or the equivalent** (as reflected in your response to Question 18), explain the circumstances that you believe demonstrate that you are in the early stages of your proposed graduate program. Be sure to read the passage on "Earned Graduate Study" in these *Guidelines*. Type single-spaced using 10-point font size or larger. There is a 1-page limit.

Proposed Plan of Research Form (NSF Form 306):

In a clear, concise, and original statement, describe research interests you may pursue while on fellowship tenure. Your statement should demonstrate your understanding of research principles necessary to pursue these interests and explain the relationship to your previous research, if any. Present your plan with a clear hypothesis or questions to be asked by the research. If you have not yet formulated a plan of research, your statement should include a description of one question that interests you and an analysis of how you think the question may best be answered. A listing of courses alone is not sufficient. Research topics discussed in your proposed plan may be used in determining eligibility. Type single-spaced using 10-point font size or larger. There is a 2-page limit, including references.

Previous Research Experience Form (NSF Form 1259):

Describe any scientific research activities in which you have participated, such as experience in undergraduate research programs, or research experience gained through summer or part-time employment or in work-study programs, or other research activities, either academic or job-related. Explain the purpose of the research and your specific role in the research, including the extent to which you worked independently and/or as part of a team, and what you learned from your

research. In your statement, distinguish between undergraduate and graduate research experience. If you have had no direct research experience, describe any activities that you believe have prepared you to undertake research. At the end of your statement, list any publications and/or presentations made at national and/or regional professional meetings. Type single-spaced using 10-point font size or larger. There is a 2-page limit, including references.

Undergraduate GPA Form (NSF Form 314):

Complete the applicant's portion of the *Undergraduate GPA* (Grade Point Average) *Form* and submit it to the Registrar of the institution you listed in Question 6 of the *Application Form*. The form is available at <http://www.nsf.gov/grfp>.

Transcript Request Form (NSF Form 316):

You should submit a single complete copy of each **official** transcript from all academic institutions attended, undergraduate and graduate, excluding fall 2001, by the preferred submission date. Submit a fall 2001 transcript or grade report as soon as it is available. Duplicate the *Transcript Request Form* as required and submit to all appropriate institutions. The form is available at <http://www.nsf.gov/grfp>.

Reference Report Form (NSF Form 299):

You are expected to submit or have submitted on your behalf four *Reference Report Forms*. Scientists or faculty members who have current knowledge of your academic and/or professional experience and ability should be selected as references, since they will be able to give meaningful answers to the questions asked. NSF suggests that at least two of the four should be persons with whom you have worked in your present (or most recent) department, including the thesis adviser if applicable.

Only the NSF *Reference Report Form* should be used for an NSF Graduate Research Fellowship application. The student reference statements on file at colleges and universities will not be accepted in lieu of the NSF *Reference Report Form*. The form is available at <http://www.nsf.gov/grfp>.

If you submit your application via FastLane, references may send *Reference Report Forms* either via FastLane, if you provide your reference code, or via postal mail. *Reference Report Forms* submitted to ORAU directly by the reference should be submitted or postmarked by December 6, 2001.

If you have applied before and find it necessary to use some of the same people as references, request that the references prepare new reports. In most cases they will be able to provide additional and more up-to-date information concerning your ability and training. *Reference Report Forms* submitted for a prior year's application cannot be transferred to a current application.

Request for Payment of GRE Subject Test Fee:

If you wish to have NSF pay your GRE Subject Test registration fee, send the *Request for Payment of GRE Subject Test Fee* form with your GRE Subject Test registration form for the December 8, 2001 GRE Subject Test to ETS by November 2, 2001. Refer to the passage on "Graduate Record Examinations" in these *Guidelines*. The form is available at <http://www.nsf.gov/grfp>.

Self-Addressed Stamped Postcard:

If you submit an application via postal mail, and wish to be notified that your application packet has been received, include a self-addressed stamped postcard (3½" x 5½" minimum) with the initial packet.

IMPORTANT POINTS:

- Observe the deadlines.
- Submit electronic applications early to avoid possible system delays.
- Submit only one application. Do not submit duplicate applications via FastLane and postal mail.
- Retain a copy of all application materials submitted. Material submitted in support of an application will not be returned.
- Obtain a Certificate of Mailing from the post office or a receipt from the special delivery service for all application materials mailed.
- Type all application information in no smaller than 10-point font size. Leave adequate margins and space between paragraphs.
- Observe the indicated page limits. Reviewers are not expected to read beyond the indicated limits.
- Do not reformat the application materials. Do not use application materials from a previous year, or from other programs.
- Do not submit off-prints, manuscripts, videotapes, slides, photographs, or other extraneous materials. These will not be included in your application file.
- Put your name on all attachments and additional sheets.
- Applicants should submit all application materials in one large envelope if submitting via postal mail. Indicate "application" on the outside of the envelope.
- If any application materials are submitted separately, indicate the contents on the outside of each envelope.
- Clearly label any replacement application materials with your name and indicate the document that is being replaced.

NATIONAL SCIENCE FOUNDATION GRADUATE RESEARCH FELLOWSHIPS

NSF-Supported Fields of Specialization

CHEMISTRY

5230	Analytical
5250	Bio-inorganic
5240	Bio-organic
5260	Biophysical
9994	Environmental
5290	Inorganic
5330	Organic
5350	Physical
5331	Polymer
5370	Theoretical
5399	Chemistry, other (specify)

COMPUTER AND INFORMATION SCIENCE AND ENGINEERING (CISE)

7240	Artificial Intelligence (including Robotics and Expert Systems)
7210	Computer Science - Languages and Systems
7200	Computer Science - Theory
7270	Computer Systems Design (including Signal Processing)
7230	Database Systems
7261	Graphics
7260	Human Computer Interaction
7250	Information Technology and Organizations
7290	Networks and Communications
7280	Scientific Computing
7220	Software Engineering
7299	CISE, other (specify)

ENGINEERING

6210	Aeronautical and Aerospace
6240	Agricultural
6250	Bioengineering and Biomedical
6330	Chemical
6350	Civil
6388	Computer Engineering
6390	Electrical and Electronic
6741	Energy
6470	Engineering Mechanics
6532	Engineering Science
9996	Environmental
6580	Industrial
6476	Materials
6620	Mechanical
6660	Metallurgical
6740	Nuclear
6245	Ocean
6716	Petroleum
6480	Polymer
6585	Systems Engineering
6799	Engineering, other (specify)

GEOSCIENCES

5710	Aeronomy
5720	Atmospheric Chemistry
5750	Chemical Oceanography
5770	Climate Dynamics
5740	Geochemistry
5780	Geology
5800	Geophysics
5810	Hydrologic Sciences
5820	Large-scale Dynamics Meteorology
5830	Magnetospheric Physics
5840	Marine Geology and Geophysics
5850	Mesoscale Dynamic Meteorology
5870	Paleoclimate
5860	Paleontology
5880	Physical Meteorology
7799	Physical Oceanography
5890	Solar-Terrestrial
5889	Geosciences, other (specify)

LIFE SCIENCES

0399	Agriculture ⁵
0140	Agronomy ⁵
4510	Anatomy ⁶
4530	Animal Behavior
4531	Animal Science ⁵
0999	Biochemistry ⁶
1870	Biological Oceanography
1899	Biology
1299	Biophysics
1599	Botany (including Plant Physiology)
1820	Cell Biology ⁶
1860	Computational Biology
1840	Developmental Biology
1830	Ecology
4570	Entomology
9992	Environmental Sciences
1850	Evolutionary Biology
4590	Fish and Wildlife ⁵
0250	Forestry ⁵
2499	Genetics ⁶
0300	Horticulture ⁵
3293	Immunology ⁶
1874	Marine Biology
3299	Microbiology ⁶
1880	Molecular Biology ⁶
1829	Neurosciences ⁶
1890	Nutrition ⁵
2970	Pharmacology ⁶
3899	Physiology ⁶
1545	Plant Pathology
4540	Soil Science
1822	Structural Biology
3290	Virology ⁶
4699	Zoology
2299	Life Sciences, other (specify) ⁶

⁵ Warning: Fellowships are awarded only for study leading to research-based master's or doctoral degrees. Practice-oriented master's programs are not eligible for support in this program. PhD programs must be science-based.

⁶ Warning: Research with disease-related goals is not eligible for support by NSF. Applicants in this field will be judged ineligible if their Proposed Plan of Research has disease-related goals and/or is insufficiently focused on basic research questions.

MATHEMATICAL SCIENCES

- 7010 Algebra or Number Theory
- 7030 Analysis
- 7050 Applications of Mathematics
(including Biometrics and Biostatistics)
- 7110 Geometry
- 7130 Logic or Foundations of Mathematics
- 7140 Operations Research
- 7150 Probability and Statistics
- 7170 Topology
- 7199 Mathematics, other (specify)

PHYSICS AND ASTRONOMY

- 4999 Astronomy
- 4930 Astrophysics
- 8040 Atomic and Molecular
- 8050 Condensed Matter Physics
- 8160 Nuclear
- 8180 Optics
- 8110 Particle Physics
- 8200 Physics of Fluids
- 8210 Plasma
- 8220 Solid State
- 8260 Theoretical Physics
- 8299 Physics, other (specify)

PSYCHOLOGY

- 4125 Cognitive
- 4120 Cognitive Neuroscience
- 4130 Developmental
- 4150 Experimental or Comparative
- 4189 Industrial/Organizational
- 4155 Neuropsychology
- 4165 Perception and Psychophysics
- 4170 Personality and Individual Differences
- 4158 Physiological
- 4162 Quantitative
- 4190 Social
- 4199 Psychology, other (specify)⁷

SOCIAL SCIENCES

- 0693 Biological Anthropology
- 0695 Cultural Anthropology
- 0694 Linguistic Anthropology
- 0696 Medical Anthropology
- 0697 Physical Anthropology
- 0699 Anthropology, other (specify)
- 0610 Archaeology
- 9818 Demography
- 8599 Economics
(Business Administration not eligible)
- 8799 Geography
- 9099 History of Science
- 9499 International Relations⁵
- 9299 Linguistics
- 9098 Philosophy of Science
- 9399 Political Science
- 9799 Public Policy⁵
- 9599 Sociology (Social Work not eligible)
- 9699 Urban and Regional Planning⁵
- 9899 Social Sciences, other (specify)

Note: For further clarification of research areas supported by the NSF, see the *National Science Foundation Guide to Programs* (<http://www.nsf.gov/cgi-bin/getpub?nsf013>).

⁷ Warning: Clinical and counseling psychology are generally not supported in this program; applicants in this field will be judged ineligible if their Proposed Plan of Research focuses on mental disease, abnormality or malfunction.

ABOUT THE NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) funds research and education in most fields of science and engineering. Grantees are wholly responsible for conducting their project activities and preparing the results for publication. Thus, the Foundation does not assume responsibility for such findings or their interpretation.

NSF welcomes proposals from all qualified scientists, engineers and educators. The Foundation strongly encourages women, minorities, and persons with disabilities to compete fully in its programs. In accordance with federal statutes, regulations, and NSF policies, no person on grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from NSF (unless otherwise specified in the eligibility requirements for a particular program).

Facilitation Awards for Scientists and Engineers with Disabilities (FASSED) provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF-supported projects. See the program announcement or contact the program coordinator at (703) 292-6865.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Relay Service (FRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation regarding NSF programs, employment, or general information. TDD may be accessed at (703) 292-5090 or through FRS on 1-800-877-8339.

PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on the application materials is solicited under the authority of the National Science Foundation Act of 1950, as amended. It will be used in connection with the selection of qualified applicants and may be disclosed to qualified reviewers and staff assistants as part of the review process; to the institution the nominee, applicant or fellow is attending or is planning to attend or is employed by for the purpose of facilitating review or award decisions, or administering fellowships or awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies needing data regarding applicants or nominees 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 from this system may be merged with other computer files to carry out statistical studies the results of which do not identify individuals. Notice of the agency's decision may be given to nominators, and disclosure may be made of awardees' names, home institutions, and fields of study for public information purposes. For fellows or awardees receiving stipends directly from the government, information is transmitted to the Department of the Treasury to make payments. See System of Records, NSF-12, "Fellowships and Other Awards," 63 Federal Register 265 (January 5, 1998). Submission of the information is voluntary; however, failure to provide full and complete information may reduce the possibility of your receiving an award.

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