NATIONAL SCIENCE FOUNDATION

GRADUATE RESEARCH FELLOWSHIPS

Guidelines for Submission of Applications

Program Year 2001

Deadline for entering the competition: November 7, 2000

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

Internet Mail: nsfgrfp@orau.gov

Web Site: http://www.orau.org/nsf/nsffel.htm
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: $16,800 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 2001

APPLICATION PREPARATION AND SUBMISSION INSTRUCTIONS

A. Application Preparation Instructions

Complete instructions are outlined in Guidelines for Submission of Applications.

B. Application Deadline

Applications must be submitted via FastLane by 5:00 p.m. in the applicant’s local time zone on November 7, 2000.

C. 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

PROPOSAL REVIEW INFORMATION

Merit Review Criteria: NSF Merit Review Criteria apply.

AWARD ADMINISTRATION INFORMATION

Award Conditions: Outlined in Information for Graduate Research Fellows booklet

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 2001, the NSF will award approximately 900 new three-year Graduate Fellowships, including awards offered for women in engineering and computer and information science. Continuing a long history of program success, NSF Fellows contribute significantly to research, teaching, and industrial applications in science, mathematics, and engineering.

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

#### Citizenship

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

**Field and Degree Program**

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 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 disease-related goals, including work on the etiology, diagnosis or treatment of physical or mental disease, abnormality, or malfunction in human beings or animals. Research involving animal models of such conditions or the development or testing of drugs or other procedures for their treatment also is not eligible for support.

#### 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 one year or less of full-time graduate study in NSF-supported fields will be given preference over more advanced students. Typically, individuals who started full-time graduate study in August/September 1999 and are applying by November 2000 will be considered to have completed no more than one year. Applicants who have completed more than one year of full-time graduate study (or the equivalent in part-time study) should explain in Question 16 of the Application Form the circumstances that they believe qualify them for being considered to be in the early stages of their graduate program. Individuals are not disqualified by reason of holding a master’s degree, provided that they meet the conditions above or in one of the bullets below.

The following list provides examples of individuals who have completed more than one year of graduate study and who may be considered to be in the early stages of their graduate study:

- **Part-time students** who have completed no more than 30 semester hours, 45 quarter hours, or equivalent of graduate study in the science, mathematics, or engineering fields supported by this program since completion of a baccalaureate degree in science, mathematics, or engineering, may apply.

- **Returning students** who have interrupted their studies (for example, to gain work experience or for family or medical reasons) are considered to be in the early stages of their graduate studies if their most recent full-time graduate study is more than two years prior to the time of application and if this interruption results in the student essentially starting over.

- **Students changing fields** are considered to be at the early stages of their graduate studies if the change is great enough so that the student is essentially starting over. If more than four courses would transfer to the new program, the reviewers will evaluate this applicant like a second year student in a continuous program.

- No individual will be eligible who, at the time of application, has earned after October 1, 1996, a PhD in science, mathematics or engineering, or any medical degree, such as the MD, DDS, or DVM.

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

The Women in Engineering and Computer and Information Science (WECs) awards are limited to women who intend to pursue graduate degrees in one of the fields listed under the headings “Engineering” or “Computer and Information Science and Engineering” later in these Guidelines. All women who apply in fields listed under “Engineering” or “Computer and Information Science and Engineering” will automatically be considered for a Women in Engineering and Computer and Information Science award. Aside from this field restriction, 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 2001 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. 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 requisites 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. Consideration is also given to 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 fuse 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 2001. 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 booklet Information for Graduate Research Fellows, including any subsequent amendments, which is provided to all awardees. Only the most basic information contained in that booklet is presented in these Guidelines. Three certifications 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 insti-
tutions 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 2001-2002 will be $16,800 for a 12-month tenure, prorated monthly at $1,400 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 2001 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 2006 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.

**Application Status**

In early January 2001, applicants will be informed via e-mail or postal mail of application materials received on their behalf. It is the applicant’s responsibility to ensure that all materials are received by ORAU; applicants who do not receive a written notification regarding the status of their application materials by January 15 are encouraged to contact ORAU immediately.

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, 2000 – 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 section on ‘Application Forms Retrieval and Submission’ later in these Guidelines.]

Undergraduate GPA Forms and transcripts should be submitted in hard copy.

- November 7, 2000 – Submission Date
  Undergraduate GPA Form
  Official Academic Transcripts (excluding fall 2000)
  Note that above items may be mailed in the same envelope.

- December 7, 2000 – Submission Date
  Reference Report Forms (four are expected)

Requests for Reactivation of Official Academic Transcripts

- November 7, 2000 – Submission date for requests for reactivation of Official Academic Transcripts.

To request reactivation of Official Academic Transcripts from the 2000 fellowship competition, send electronic mail to nsgrfp@orau.gov by November 7, 2000.

Graduate Record Examinations

All applicants are expected to take the GRE General Test (Verbal, Quantitative, and Analytical). In addition, all applicants should take a GRE Subject Test in the science, mathematics, or engineering field most closely related to their chosen area of graduate study. Further information concerning payment of GRE registration fees and score reporting for fellowship evaluation purposes is included in the application materials. Registration forms and information concerning the GRE are available from four-year colleges, universities, or the Educational Testing Service (ETS), P.O. Box 6000, Princeton, New Jersey 08541-6000, telephone (609) 771-7670, fax (609) 771-7906 or Internet http://www.gre.org.

- November 3, 2000 - Receipt date for GRE Registration Forms at the ETS for NSF applicants for the December 9, 2000 Subject Test.
- December 9, 2000 - Last date for GRE Subject Test for NSF applicants.
- December 30, 2000 - Last date for GRE General Test for NSF applicants.

Application Forms Retrieval and Submission

For individuals who do not have access to the Internet and NSF’s FastLane system, 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, 2000. Applications postmarked or submitted later than November 7, 2000 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 Viewer installed, which is a free product and can be downloaded at this site. If your browser does not automatically launch the Microsoft Word 97 online 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 the 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 nsfo00128 (for Guidelines for Submission of Applications)
get fmgrfkitp.txt (for instructions to access the PDF files)
get fmgrfkitp.pdf (for the PDF Application Forms Kit)
get fmgrfkitd.txt (for instructions to access the Word 97 files)
get fmgrfkitd.doc (for the Word 97 Forms Kit)
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 correlate application materials, to assist reviewers in evaluating qualifications 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 which 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):

1. Social Security number.
2. Former last name (any last name 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) and 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 2001. It is your responsibility to ensure the accuracy and currency of this information. Notify ORAU immediately of any change in e-mail address.
6. Date of birth, place of birth, and gender.
7. 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.
8. 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.
9. 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 and your alien registration number. Indicate country of citizenship if not U.S.
10. Indicate if you have a disability that limits a major life activity.
11. In addition to announcing awards, NSF also publishes the names of applicants who qualify for honorable mention designation. 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.
12. 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. Failure to respond to this question will be treated as a negative response.
13. If applying via postal mail, respond to this question regarding FastLane.

Application Form (NSF Form 289):

1. Major field of specialization: Select only one major field. Reference the “NSF Supported Fields of Specialization” list in the back of these Guidelines.
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 in writing. 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:** If currently enrolled in a college or university, indicate whether full-time or part-time. Also indicate the level (undergraduate, graduate, or unclassified postbaccalaureate). Indicate the institution where you are currently enrolled along with the city and state or country. If you are not currently enrolled, indicate your present occupation or profession.

9. **Five-year Program:** Indicate if you are enrolled in a five-year joint baccalaureate-master’s degree program.

   **Four-year Program:** Indicate if you are enrolled in a four-year joint baccalaureate-master’s degree program.

10. **Completed graduate study in science, mathematics, or engineering since receipt of your bachelor’s degree:** List the institution, department, dates attended, and number of graduate hours (including course work, research, seminars, and independent study) completed since receipt of your bachelor’s degree. Include only study in fields supported by this program. 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 GRE Information Sheet.) 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.

12. **Individuals chosen to submit Reference Report Forms:** Choose faculty members, scientists, or engineers 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 all fellowships, scholarships, teaching, and other positions relevant to your field held since entering college/university.** Begin with the most recent position/scholarship.

15. **List all academic honors you have received relevant to your major field of study.**

16. **Describe your personal or educational experiences** in 1000 words or less. Applicants who have completed more than one year of full-time graduate study (or the equivalent in part-time study) should explain the circumstances that they believe qualify them for being considered to be in the early stages of their graduate program. Type single-spaced using 10-point font size or larger.

17. **Describe your experiences integrating research and education, advancing diversity in science, and contributing to your community, both scholarly and social** in 1000 words or less. Type single-spaced using 10-point font size or larger.

**Proposed Plan of Research Form (NSF Form 306):**

In a clear, concise, and original statement, describe any research interests you may pursue while on fellowship tenure. Your statement should demonstrate your understanding of research principles necessary to pursue these interests. 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 (1) a description of two or three research questions that interest you, with an explanation of the relationship to your previous research, if any, and (2) an analysis of how you think these questions 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.

**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 student-originated studies programs, 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 rationale for your work and your specific role in the research, including the extent to which you worked independently and/or as part of a team. 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 under-
take 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.

**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.

**Transcript Request Form** (NSF Form 316): You must submit complete official transcripts of your academic records, undergraduate and graduate, excluding fall 2000, by the postmark or submission date. Only one copy of each transcript is required. Duplicate the Transcript Request Form as required and submit to all appropriate Registrars.

You should submit a fall 2000 transcript or grade report as soon as it is available.

**Reference Report Form** (NSF Form 299): You are expected to submit four (4) 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 possible.

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 must be submitted or postmarked by December 7, 2000.

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.

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.

**Graduate Record Examinations** (GRE): See the GRE Information Sheet for further information concerning the GRE.

**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 5⅓” minimum) with the initial packet. Please note that postcards without an address or without postage will not be returned.
**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)

**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 Paleoclim ate
- 5860 Paleontology
- 5880 Physical Meteorology
- 7799 Physical Oceanography
- 5890 Solar-Terrestrial
- 5889 Geosciences, 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)

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

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4 Warning: Research with disease-related goals is not eligible for support by NSF. Applicants in this field will not be included in the competition if their Proposed Plan of Research has disease-related goals and/or is insufficiently focused on basic research questions.
### LIFE SCIENCES (continued)
- 1822 Structural Biology
- 3290 Virology
- 4699 Zoology
- 2299 Life Sciences, other (specify)

### 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)

### 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 (other than Physical)
- 9099 History of Science
- 9499 International Relations
- 9299 Linguistics
- 9098 Philosophy of Science
- 9399 Political Science
- 9799 Public Policy
- 9599 Sociology (Social Work not eligible)
- 9699 Urban and Regional Planning
- 9899 Social Sciences, other (specify)

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**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?nsf0065).

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

6 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.
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The Catalog of Federal Domestic Assistance number for this program is 47.076, Education and Human Resources.

OMB 3145-0023
PT 22, FF, II
KW 0502031
0502023
0502042