Faculty Early Career Development (CAREER) Program

Including the description of the NSF component of the Presidential Early Career Awards for Scientists and Engineers (PECASE)

Guidelines for Submission of Proposals

Proposals must be received by July 22, 1998

Next proposal deadline is expected to be July 22, 1999. Program guidelines will be available only on www.nsf.gov.
I. PURPOSE

A. CAREER Program

To sustain and strengthen the Nation’s science, mathematics, and engineering capabilities and to promote the use of those capabilities in service to society, the National Science Foundation (NSF) is dedicated to strengthening linkages among individuals and institutions committed to progress in research and education and to fostering the natural connections between the processes of learning and discovery. NSF aims to encourage integrated environments for research and education, in which education is infused with the joy of discovery and research is informed by the needs of the learning process.

Because of the critical roles played by faculty members in integrating research and education, NSF has established the Faculty Early Career Development (CAREER) program. This premier program emphasizes the importance the Foundation places on the early development of academic careers dedicated to stimulating the discovery process, in which the excitement of research is enhanced by inspired teaching and enthusiastic learning. It combines in a single program the support of research and education of the highest quality and in the broadest sense. Participation in this program by those traditionally underrepresented in science and engineering is especially encouraged.

B. PECASE Program

The Presidential Early Career Award for Scientists and Engineers (PECASE) is the highest honor bestowed by the United States government on scientists and engineers beginning their independent careers. PECASE awards recognize outstanding scientists and engineers who, early in their careers, show exceptional potential for leadership at the frontiers of knowledge. Consistent with its mission to support research in academic environments, each year NSF will select its PECASE nominees from among new faculty who have received CAREER awards based on their potential for integrated contributions to education and research. Up to twenty PECASE nominees will be selected from among the most meritorious PECASE-eligible CAREER awardees who applied to the July 22, 1998, CAREER program. These PECASE recipients will be honored in late 1999. (A brochure giving a government-wide description of PECASE is available from the CAREER page on the World-Wide Web. From the NSF home page <www.nsf.gov>, select “Crosscutting Programs,” then “CAREER.”)

II. ELIGIBILITY

A. CAREER Program

Outstanding new faculty who intend to develop academic careers involving both research and education, and who are eligible, are encouraged to apply for support toward that goal under the CAREER program. CAREER awards are not intended for senior or highly experienced investigators who already have established independent research careers. To be eligible for a CAREER award, applicants MUST MEET ALL of the following requirements:

- be employed at an institution in the U.S., its territories or possessions, or the Commonwealth of Puerto Rico, that awards a baccalaureate or advanced degree in a field supported by NSF;
- be in their first or second full-time tenure-track academic appointment and have begun the first tenure-track or tenure-track-equivalent appointment (at any institution) on or after July 1, 1994 and before July 22, 1998 (see below for an explanation of “tenure-track-equivalent” appointments);
• not be tenured or have held tenure on or before July 22, 1998; and

• not be a current or former recipient of an NSF PECASE, Presidential or NSF Young Investigator, Presidential Faculty Fellow, or NSF CAREER award. Prior or concurrent Federal support for other types of awards or for non-duplicative research does not preclude eligibility.

The following are exceptions to the eligibility criteria listed above. Individuals in the following categories may also be eligible to apply. Prior to proposal submission, applicants should carefully document their case for receiving an exemption to the above requirements and obtain written approval for exemption from the appropriate NSF program director (see item 6 under “PROPOSAL PREPARATION” in this document):

• Individuals in “tenure-track-equivalent” positions whose appointments are continuing faculty appointments having substantial educational responsibilities at institutions or departments that do not offer tenure;

• Individuals who are engaged in significant education and research activities at two-year colleges or non-profit or non-academic institutions such as museums, observatories, and research laboratories;

• Non-tenured faculty whose initial full-time tenure-track appointment preceded July 1, 1994, and who have interrupted their careers for substantive reasons such as family leave or serious health problems.

Research projects may include partnerships, but only single-investigator proposals are appropriate. Proposals submitted with co-investigators will be returned without review.

NSF will not simultaneously consider a CAREER proposal and a traditional proposal for the same research. An applicant may have only one CAREER proposal under consideration by NSF at any time and may receive only one CAREER award. NSF will not support through a CAREER award research activities that are concurrently supported from other sources.

B. PECASE Program

In addition to meeting the eligibility requirements of the CAREER program listed above, PECASE nominees must be U.S. citizens, nationals, or permanent residents who hold such status on or before July 22, 1998. To be considered for PECASE, CAREER proposals must include one signed and dated copy of the PECASE Information Form (NSF Form 1317A), available from the CAREER Web page. Individuals can receive only one PECASE award in their careers.

The CAREER awards of those NSF nominees who are selected to receive a PECASE award will be adjusted to provide a total of $500,000 and to a five-year duration.

III. CAREER PROGRAM CHARACTERISTICS

The CAREER program is a Foundation-wide activity encompassing all areas of research and education in science and engineering normally supported by NSF. Proposals from women, underrepresented minorities, and persons with disabilities are especially encouraged. A guiding principle of the program is that a CAREER proposal competes with other proposals from CAREER-eligible faculty in the same discipline. Each year, NSF expects to make approximately 350 new CAREER awards.

A. Preparation for Proposal Submission

All of the documents and forms referenced in these Guidelines (except the EPSCoR Certification Form) are available in electronic format from the CAREER Web page (from the NSF home page <www.nsf.gov>, select “Crosscutting Programs,” then “CAREER”). Printed copies can be requested from the NSF Publications Clearinghouse at: P.O. Box 218, Jessup, MD 20794-0218, phone: 301-947-2722, or e-mail: pubs@nsf.gov.

You may submit your CAREER proposal either by paper copies or electronically using FastLane. If you are submitting your proposal using paper copies rather than electronically, you are required to submit the proposal cover sheet and project summary to NSF using FastLane. Choose only one of these methods (either FastLane cover-and-summary submission or full FastLane proposal).

If you have never submitted a proposal to NSF as a Principal Investigator (PI), or if your institution is not registered to use FastLane, follow the instructions in the document “Overview of FastLane and CAREER Proposal Submission,” which is located on the CAREER Web page. This document provides directions for adding a new PI, registering an institution to use FastLane, and instructions for FastLane cover-and-summary submission. The instructions for full FastLane proposal submission can be found on the FastLane Web page at: http://www.fastlane.nsf.gov/a1/newstan.htm.

In order to determine the match between the proposed research and education plans and NSF programs, applicants should refer to NSF’s Guide to Programs (NSF 97-150). Applicants with questions about intellectual areas of support, discipline eligibility, or individual eligibility should contact the appropriate NSF program listed in Appendix A of the Grant Proposal Guide (GPG) (NSF 98-2). Proposals that NSF determines to span more than one NSF program will be co-reviewed by the relevant programs.
Before preparing a CAREER proposal, applicants are strongly encouraged to refer to the CAREER “Frequently Asked Questions (FAQ)” document (CAREER-FAQ), available on the CAREER Web page. This document gives important information about disciplinary award ranges or standard award sizes for CAREER awards, as well as about CAREER supplement opportunities and requirements.

Applicants from states involved in the Experimental Program to Stimulate Competitive Research (EPSCoR) should refer to the EPSCoR Program Solicitation (NSF 98-12) and the instructions found on the EPSCoR Program Web page at http://www.ehr.nsf.gov/EHR/EPSCOR/report/cofund.htm. For a list of EPSCoR states, see the EPSCoR Program Solicitation, the NSF Guide to Programs, or the CAREER-FAQ.

Applicants to Polar Programs should refer to the Antarctic Research Program Announcement (NSF 96-93) or the Arctic Research Program Announcement (NSF 98-72). Both of these documents are available from the Office of Polar Programs Web page. (From the NSF home page <www.nsf.gov>, select “Polar Research,” then “Office of Polar Programs.”)

Proposals submitted to the Division of Research, Evaluation and Communication (REC) in the Directorate for Education and Human Resources (EHR) must describe activities in education research and education. Refer to the CAREER award lists, available from the CAREER Web page, for information on CAREER awards funded by the REC Division. Additional information on appropriate research areas in science, mathematics, technology and engineering education can be found on the REC Division's Web page. (From the NSF home page <www.nsf.gov>, select "Education," then "REC.")

B. Collaborative Activities

Establishing collaborations with partners from other sectors, e.g., industry, national laboratories, or schools and school districts, is strongly encouraged (see item 16 of these Guidelines, “Special Information and Supplementary Documentation”).

Plans for international collaborations are also encouraged. Access to unique research equipment and facilities, and the opportunity to collaborate with outstanding foreign researchers and educators, may provide substantial benefits to the research and education proposed. For additional information on the types of activities that are eligible for support in various countries, contact the Division of International Programs and refer to the document International Opportunities for Scientists and Engineers (NSF 96-14) available from the NSF Division of International Programs Web page. (From the NSF home page <www.nsf.gov>, select “Social, Behavioral Sciences,” then “Division of International Programs.”)

C. Award Level and Duration

CAREER awards, including indirect costs, will range from a minimum of $200,000 to a maximum of $500,000 over a 4- to 5-year period. Proposal budgets should be prepared according to disciplinary practices and the scope of the project. Some NSF directorates, divisions or programs may have an award funding range or a standard award size and/or duration. Applicants are strongly encouraged to refer to the CAREER-FAQ document section on “Budgets and Administration of Awards” for specific information regarding award sizes. The intent of CAREER awards is to provide stable support at a sufficient level and duration to enable awardees to achieve the education and research career-development objectives of the program.

IV. SUPPLEMENTS TO CAREER AWARDS

CAREER awards are eligible for supplemental funding, as described in the GPG, Section VI.B.4. Cost-sharing is not required for consideration of these supplement requests.

In addition, to encourage development of partnerships, up to $25,000 per year may be made available to match support obtained from eligible sources, such as industry, state, county or local governments, or appropriate non-profit institutions. Requests for matching support must include documentation to show a genuine intellectual involvement between the awardee and the collaborator in one of these sectors for a project that extends the integrated research and education goals of the original award. Only contributions received after the CAREER proposal is officially submitted are eligible for matching support. New FY99 CAREER awardees will have until October 1, 1999, to request their first year’s matching support. The annual deadline for submission of supplement requests for each subsequent year is October 1 of that year.

The matching support may consist of cash, new permanent research equipment, educational equipment or software essential to the CAREER awardee’s activities, or donations of materials for support of research and education. Contributions of services or staff support, donations of used equipment, or access to equipment or software owned by an organization are encouraged but are not eligible for matching. Donations where there is no collaborative effort, such as from individual philanthropists, foundations, the principal investigator’s home institution, and educational and professional associations, are not eligible for matching.

V. PROPOSAL PREPARATION

Proposals must be prepared in accordance with the NSF Grant Proposal Guide (GPG) (NSF 98-2), the document “Overview of FastLane and CAREER Proposal Submission,” and instructions in these Guidelines. All of the forms listed below are available in electronic format from the CAREER Web page, with the exception of the EPSCoR Certification Form. All of the forms, except the PECASE Information
Form and the EPSCoR Certification Form, can be found in the GPG and must be used when specified in the GPG. Do not include such additional documentation as a biographical sketch or NSF forms for any collaborator. The proposal format should follow the sequence below:

1. Information about Principal Investigator (NSF Form 1225) (with original copy only for FastLane cover-and-summary submission and electronic copy only for full FastLane submission).

2. List of suggested reviewers or reviewers not to include (optional, with original copy only). (See GPG, Section II.B.2).

3. PECASE Information Form (NSF Form 1317A) (signed and dated, with original copy only). This form, if applicable, must be included with the proposal and be submitted by the CAREER deadline to be eligible for consideration for PECASE.

4. EPSCoR Certification Form (NSF Form 1404) (if applicable, signed, with original copy only). A working copy of this form is on the EPSCoR Program Web page at: http://www.ehr.usgs.gov/EHR/EPSCOR/report/cofund.htm. The final copy must be completed and signed by the EPSCoR State Project Director and submitted with the original proposal.

5. Deviation Authorization (if applicable, with original copy only). (Refer to the GPG, Chapter II.A, for instructions on deviations).

6. NSF approval for exemption from CAREER eligibility requirements (if applicable, with original copy only). (See the section on “ELIGIBILITY” in these guidelines.)

7. Cover Sheet (NSF Form 1207) (page 1, all copies; pages 1 and 2, original copy only). The cover sheet (along with the project summary) must be submitted electronically through FastLane (either in a full FastLane proposal or as a FastLane cover-and-summary submission). Refer to the document “Overview of FastLane and CAREER Proposal Submission,” available from the CAREER Web page.

To complete the FastLane cover sheet block “For Consideration by NSF Organizational Unit(s),” select (from the pull-down list) the NSF directorate, division, or program most closely associated with the proposed research activity (see GPG, Appendix A). In the block “Program Announcement/ Solicitation No./ Closing Date,” enter “NSF 98-103.” The title should begin with “CAREER;” followed by the descriptive title of the planned activities. No co-investigator can be listed.

8. Project Summary. (Refer to instructions in Chapter II.D.2 of the GPG.) The Project Summary (along with the cover sheet) must be submitted electronically through FastLane. Refer to the document “Overview of FastLane and CAREER Proposal Submission,” which is available from the CAREER Web page. Include both education and research aspects of the proposal and their integration. Do not exceed one page in length.

9. Table of Contents (NSF Form 1359).

10. Project Description and Results from Prior NSF Support. (See GPG, Section II.D.4.) This section consists of (a) a description of results from prior NSF support, if applicable; (b) a Career Development Plan; and (c) departmental endorsement and certifications (required). Parts a and b must not exceed 15 pages total, including any graphical and tabular materials. Part c must be the last page and cannot exceed one page. The entire Project Description (parts a, b, and c) must not exceed 16 single-spaced pages.

a. Results from Prior NSF Support. (See GPG, Section II.D.4.)

b. Career Development Plan. This section should be a clear statement of the nature and implementation of the integrated research and education activities proposed. Plans in both areas should be specific and directly related to the applicant’s career goals, job responsibilities, and the goals of the institution. This plan should be developed in consultation with the department head or equivalent institutional official.

Applicants are encouraged to describe a range of planned activities that include research, assigned instructional activities, and education activities that move beyond routine education and service responsibilities. Education activities can include designing new educational materials and practices, and/or adapting and implementing effective educational materials and practices developed elsewhere. A discussion of the relationship between the research and education aspects should be included as evidence of an integrated career-development plan.

While excellence in both education and research is expected, activity of an intensity that leads to an unreasonable workload is not. For instance, teaching additional courses or taking on additional duties is not expected: in fact, a justification for release time may be appropriate for extraordinary curriculum development or education innovation. What is expected is a well-argued and specific proposal for activities over a 4- or 5-year period that will build a firm foundation for a lifetime of integrated contributions to research and education.

This section should follow the standard NSF proposal format and should present:
• objectives and significance of the proposed integrated research and education activities;

• the relation of the research to the current state of knowledge in the field, and of the education activities to the current state of knowledge on effective teaching and learning in one’s discipline;

• an outline of the plan of work, describing the methods and procedures to be used, including evaluation of the education activities;

• a summary of prior research and education accomplishments.

**Examples of Areas of Education Activities**

Proposed education activities may be in a broad range of areas. They may address curriculum, pedagogy, outreach, or mentoring at any level, including graduate and undergraduate students, majors and non-majors, teacher preparation or enhancement, K-12 students, or the general public.

**Examples include, but are not limited to:**

- Course or curriculum development;
- Pre-college teacher preparation and enhancement;
- Outreach and mentoring activities to enhance scientific literacy or involve students from groups that have been traditionally underrepresented in science;
- Research on pedagogy or students’ learning and conceptual development in the discipline;
- Incorporating research activities into undergraduate courses;
- Linking education activities to industrial, international, or cross-disciplinary work;
- Innovative methods for evaluation and assessment of the proposed education activities.

c. **Departmental Endorsement and Certifications.**

The last page of the Project Description must include the following three endorsement and verification statements. **(Do not exceed one page total.)**

- A statement that describes the department’s partnership and the institutional commitment to support the research and education career-development plan, including a description of how the faculty member’s Career Development Plan is supported by and is integrated into the educational goals of the department and the institution. The support could include, but is not limited to, cost-sharing, commitments for mentoring, provision of academic-year or summer salary, instrumentation, laboratory facilities, research support, or graduate-student stipends;

- A statement verifying the following CAREER eligibility information: (a) that the applicant is in his/her first or second tenure-track appointment; (b) the official effective date of the applicant’s first tenure-track appointment (month/day/year), and (c) the institution where the applicant’s first tenure-track appointment began;

- A statement, “I have read and I endorse this Career Development Plan.”

The applicant’s department head (or equivalent institutional official) must sign the bottom of this page, thereby attesting to the departmental endorsement of the Career Development Plan, the Department’s partnership in the applicant’s career development, and the applicant’s eligibility. **Below the signature, type the official’s name, title, and date.**

Proposals that do not include all of these statements will be returned without review.

11. References Cited for both research and education activities of the proposal. (See GPG, Section II.D.5.)

12. Biographical Sketch of Principal Investigator. (See GPG, Section II.D.6.) Include both research and education activities and accomplishments. **(Limited to two pages.)**

13. Budget (NSF Form 1030) (cumulative and annual budgets, including subcontract budgets, if any, and up to 3 pages of Budget Justification). Budget requests should be submitted for NSF support totaling $200,000 to $500,000 and for an award duration of at least 4 but not more than 5 years. **Before preparing a budget request,** refer to the CAREER-FAQ document, under the section “Budgets and Administration of Awards,” for specific information about disciplinary award ranges or standard award sizes. No funds may be budgeted for the principal investigator’s academic-year salary unless justified by a plan for a limited period of field work or other extraordinary career-development activity in research or education. No co-investigators are allowed. No salary support for other senior personnel is allowed. NSF will reimburse indirect costs at your institution’s official, negotiated rate. See GPG, Section II.D.7.a(i), for policies regarding summer salary.

NSF encourages organizations responding to this announcement to contribute to the costs of the project supported by NSF. While cost-sharing (beyond the statutory minimum) is not required for this program, any cost-sharing specified in the proposal will be referenced and included as a condition of any award resulting from this announcement.

Facilities, Equipment, and Other Resources (NSF Form 1363).

Special Information and Supplementary Documentation. Special information as specified in GPG, Section II.D.10, should be included, as appropriate. This includes letters of commitment to support proposed collaborations. Only letters that describe the planned collaborative effort(s) will be accepted; letters of reference or recommendation are not appropriate and will not be sent to reviewers. For full FastLane proposal submissions, supplementary documents (including letters of commitment) can be scanned into the back section of your project description as a PDF file, but a paper copy of each must be sent in with signed cover sheets by the deadline given below.

Appendices may not be included unless a deviation has been authorized, according to the procedures described in GPG, Section II.A.

VI. PROPOSAL DEADLINE AND DOCUMENT SUBMISSION

Full FastLane proposal submissions: The full FastLane proposal must be received by NSF on or before 5:00 p.m. Eastern Time on July 22, 1998, and the signed, original documents (as identified below) must be received by the appropriate CAREER division contact (listed at the end of this document) by 5:00 p.m. Eastern Time on July 29, 1998. (Include the following in the address: “CAREER, NSF 98-103, original documents.”)

FastLane cover-and-summary submissons: The signed FastLane cover sheet and project summary, and the originals and paper copies of all proposal documents, must be received at NSF by 5:00 p.m. Eastern Time on July 22, 1998.

Any CAREER proposal received after the deadline will be returned without review.

For full proposal submission using FastLane: After you have submitted your electronic (FastLane) proposal, the original only of the following paper documents and forms must be received by the appropriate CAREER division contact (listed at the end of this document) by 5:00 p.m. Eastern Time on July 29, 1998 (within one week of the CAREER proposal submission deadline): the original signed cover sheet (pages 1 and 2) and any single-copy or signed additional forms and documents (if applicable), such as the Departmental Endorsement and Certifications; the PECASE Information Form (NSF Form 1317A); the EPSCoR Certification Form (NSF Form 1404); any deviation authorization; an NSF approval for exemption from CAREER eligibility requirements; a list of suggested reviewers to include or not to include; and any letters describing collaborative efforts. Instructions for full FastLane proposal submission can be found on the FastLane Web page at: http://www.fastlane.nsf.gov/a1/newstan.htm.

For FastLane cover-and-summary submission: In addition to the electronic (FastLane) cover sheet and project summary, the full proposal (original with signatures plus the required copies) including all forms and documents as specified in these Guidelines must be received by NSF by 5:00 p.m. Eastern Time on July 22, 1998, at the address listed below. The required number of copies can be found next to the Division abbreviation and code in the section “CAREER Contacts by Directorate” of this document. Refer to the document “Overview of FastLane and CAREER Proposal Submission” on the CAREER Web page for instructions on submission of the FastLane cover sheet and project summary.

Proposal packages (for FastLane cover-and-summary submissions) should be sent to:

NATIONAL SCIENCE FOUNDATION PPU
Announcement No. NSF 98-103, CAREER PROGRAM
4201 WILSON BLVD. ROOM P60
ARLINGTON VA 22230

Do not send original documents for full FastLane proposal submissions to the NSF PPU. As directed above, they should be sent to the appropriate CAREER division contact listed at the end of this document.

VII. CAREER PROPOSAL REVIEW AND EVALUATION

Merit evaluation of proposals will be carried out in the research directorates and divisions through mail review, panel review, or a combination of the two. A CAREER proposal will compete with other proposals from CAREER-eligible faculty in the same discipline. CAREER proposals will be reviewed in accordance with the two criteria established by the National Science Board as contained in the Grant Proposal Guide (NSF 98-2), Chapter III.A., Review Criteria. Because of the CAREER Program’s focus on balanced academic career development including both research and education, the second-merit review criterion, “What are the broader impacts of the proposed activity?” will receive greater weight than is customary for traditional research proposals.

Since CAREER proposals are reviewed by different panels and/or mail reviews held at different times across NSF, award and declination letters will be issued at different times. You can check the status of your CAREER proposal by accessing FastLane. If you have not received notification of a decision on your CAREER proposal by the beginning of February 1999, and your proposal status is shown as “pending” in FastLane, you can contact the program or division to which your proposal was assigned to inquire about the status. Your proposal’s NSF program assignment can be found through FastLane or on the acknowledgment card that will be sent to you when your proposal is received by the NSF program.
VIII. CAREER REPORTING REQUIREMENTS

Annual progress reports, as described in GPG, Section VII.G.1, are required. Questions about annual reports should be directed to the assigned disciplinary program director. Annual progress reports should summarize progress in both research and education development and, where appropriate, collaborative activities. The report should also include an update of other support. The report must be countersigned by the awardee's department head or equivalent, thereby reaffirming the department's endorsement of the work plan and continuing partnership in the individual's career development. In addition to providing information for NSF staff review and monitoring of the career-development progress of individual awardees, this information will be used in program evaluation and assessment. Supplementary information for this purpose may be requested from time to time. NSF is planning to implement a new electronic project-reporting system, through the NSF FastLane system, which will permit updating of reports on project participants (individual and organizational), activities, findings, publications, and other specific products and contributions. Until the new project-reporting system is available, annual reports should continue to be filed on NSF Form 1328. Once the new NSF FastLane reporting system becomes available, NSF will encourage filing of project reports or updates through use of that system and will provide instructions for its use.

IX. CAREER GRANT ADMINISTRATION AND CONDITIONS

Grants awarded as a result of this solicitation will be administered in accordance with the terms and conditions of NSF Grant General Conditions (GC-1) or FDP-III. More comprehensive information is contained in the NSF Grant Policy Manual (NSF 95-26).

CAREER awardees must resign their CAREER awards if they transfer at any time prior to or during the tenure of that award to positions that are not tenured, tenure-track or equivalent or to institutions that are not CAREER-eligible. Before transferring a CAREER award, NSF may request documentation from the PI's new institution and department head in support of the career goals and departmental partnership as proposed in the original Career Development Plan. CAREER awardees from EPSCoR jurisdictions should consult the EPSCoR Program Solicitation (NSF 98-12) about non-transferability of EPSCoR co-funding.

X. CAREER CONTACTS BY DIRECTORATE

On the FastLane proposal cover sheet, using the pull-down list, select the directorate, division, or program that, in your opinion, best fits your research activities. This information will be used to expedite the initial distribution of the proposals, but NSF will make the final assignment. If, after you receive an acknowledgment card, you wish to discuss this assignment, please contact the assigned disciplinary program director indicated on the acknowledgment card. If you do not receive an acknowledgment card by September 15, 1998, notify the CAREER contact listed below. Once your proposal is assigned to an NSF program, all communications about your proposal should be directed to the assigned disciplinary program director, with reference to the proposal number.

Lists of NSF programs for use in completing the proposal cover sheet are available in GPG, Appendix A. Information about directorates, divisions, and programs is available from NSF’s Guide to Programs (NSF 97-150). General questions about the CAREER or PECASE program may be directed to directorate or division contacts listed on the following pages. Specific questions about proposal development, appropriate disciplinary funding levels, and supplement opportunities and requirements should be directed to the appropriate disciplinary program. (See GPG, Appendix A, for a list of programs.)

Directorate for Biological Sciences (BIO)
(http://www.nsf.gov/home/bio/start.htm)

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<th>Division of Environmental Biology (DEB - 0801 - 15 copies):</th>
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<td>CAREER Contact: James T. Callahan</td>
<td><a href="mailto:jcallaha@nsf.gov">jcallaha@nsf.gov</a></td>
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<td><a href="mailto:fstollni@nsf.gov">fstollni@nsf.gov</a></td>
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<td><a href="mailto:pchuang@nsf.gov">pchuang@nsf.gov</a></td>
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<td><a href="mailto:tquarles@nsf.gov">tquarles@nsf.gov</a></td>
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**Directorate for Computer and Information Science and Engineering (CISE)**  
(http://www.nsf.gov/home/cise/start.htm)

Division of Computer-Communications Research (C-CR - 0501 - 10 copies):  
CAREER Contact: S. Kamal Abdali kabdali@nsf.gov  
703-306-1910

Division of Information and Intelligent Systems (IIS - 0502 - 10 copies):  
CAREER Contact: Gary W. Strong gstrong@nsf.gov  
703-306-1930

CAREER Contact: Richard S. Hirsh rhirsh@nsf.gov  
703-306-1970

Div. of Advanced Networking Infrastructure & Res. (ANIR - 0505 - 10 copies):  
CAREER Contact: Aubrey Bush abush@nsf.gov  
703-306-1950

Div. of Experimental and Integrative Activities (EIA - 0506 - 18 copies):  
CAREER Contact: Mike Foster mfoster@nsf.gov  
703-306-1980

**Directorate for Education and Human Resources (EHR)**  
(http://www.nsf.gov/home/ehr/start.htm)

Division of Research, Evaluation & Communication (REC - 1105 - 15 copies):  
703-306-1650

Research on Education, Policy and Practice (REPP):  
CAREER Contact: Anthony E. Kelly aekelly@nsf.gov  
703-306-1650

Evaluation Studies:  
CAREER Contact: Conrad Katzenmeyer ckatzenm@nsf.gov  
703-306-1650

**Directorate for Engineering (ENG)**  
(http://www.nsf.gov/home/eng/start.htm)

CAREER Directorate Contacts: Janet C. Rutledge engcarr@nsf.gov  
703-306-1384  
Sharon L. Middledorf engcarr@nsf.gov  
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