

# Postdoctoral Research Fellowships in Biological Informatics

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## Program Solicitation

NSF 04-539

*Replaces Document 98-162*



**National Science Foundation**  
Directorate for Biological Sciences

## Application Deadline(s) (due by 5 p.m.submitter's local time):

Second Monday in April

April 12, 2004; April 11, 2005; and April 10, 2006. Research starter grant proposals may be submitted at any time between September and March

## SUMMARY OF PROGRAM REQUIREMENTS

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### General Information

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#### Program Title:

Postdoctoral Research Fellowships in Biological Informatics

#### Synopsis of Program:

The Directorate for Biological Sciences (BIO) offers Postdoctoral Research Fellowships in Biological Informatics to recent recipients of the doctoral degree for research and training in developing and using computational, statistical, and other tools in the collection, organization, dissemination, and use of information to solve problems in biology. The research and training plan of each fellowship is expected to address important scientific questions in contemporary biology and include a strong linkage between computer, information, and computational science and biology and develop and/or apply state-of-the-art informatics tools or approaches to the stated problem. Fellows who accept a tenure-track position following the fellowship may apply for research starter grants.

#### Cognizant Program Officer(s):

- Carter Kimsey, Program Manager, Directorate for Biological Sciences, Division of Biological Infrastructure, 615 N, telephone: (703) 292-8470, fax: (703) 292-9063, email: [ckimsey@nsf.gov](mailto:ckimsey@nsf.gov)

#### Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s):

- 47.074 --- Biological Sciences

## Eligibility Information

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- **Organization Limit:**

NSF postdoctoral fellowships are awards to individuals, and applications are submitted directly by the applicant to NSF. Fellows must affiliate with institutions (e.g., colleges and universities, and privately-sponsored nonprofit institutes and museums, and, under special conditions, for-profit organizations). Research starter grants must be submitted through organizations eligible for NSF funding.

- **PI Eligibility Limit:**

Applicants must be U.S. citizens, nationals, or legally admitted permanent resident aliens of the United States; earn the doctoral degree in a scientific or engineering field; have served as a postdoctoral researcher for no more than 24 months (full time equivalent); must present a research and training plan that develops and/or uses computational, statistical, and other tools in the use, organization, dissemination, and collection of information to address problems in biology; select a host institution and sponsoring scientist different from the doctoral degree and current position; and not have other Federal funding of more than \$20,000.00 or have submitted concurrently the same project to another NSF program.

- **Limit on Number of Proposals:**

Applicants may submit only one fellowship application to NSF per fiscal year. There is no limit on the number of applicants that an institution may host. Starter research grants are one-time awards.

## Award Information

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- **Anticipated Type of Award:** Fellowships and starter grants
- **Estimated Number of Awards:** 15 - fellowships and 5 research starter grants per year contingent upon availability of funds
- **Anticipated Funding Amount:** \$1,150,000; Approximately \$1,150,000 in fiscal year 2004, contingent upon the quality of applications and availability of funds

## Preparation and Submission Instructions

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### A. Application Preparation Instructions

- **Application Preparation Instructions:** Applicants must submit applications for fellowships and proposals for research starter grants via FastLane. Specific instructions are found both in this program solicitation and FastLane and differ from the standard Grant Proposal Guide (GPG) proposal preparation guidelines. See the full program solicitation for further information.

### B. Budgetary Information

- **Cost Sharing Requirements:** Cost Sharing is not required.
- **Indirect Cost (F&A) Limitations:** Not Applicable.
- **Other Budgetary Limitations:** The fellowship award amount is \$60,000 per year for two or three years as determined when the fellowship is offered. For research starter grants, NSF provides up to \$50,000 depending on the amount of start-up funds provided by the institution to the former Fellow.

### C. Due Dates

- **Application Deadline Date(s)** (due by 5 p.m. submitter's local time):  
Second Monday in April  
April 12, 2004; April 11, 2005; and April 10, 2006. Research starter grant proposals may be submitted at any time between September and March

## Proposal Review Information

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- **Merit Review Criteria:** National Science Board approved criteria apply.

## Award Administration Information

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- **Award Conditions:** Additional award conditions apply. Please see the full text of this solicitation for further information.
- **Reporting Requirements:** Applicants must file starting and termination certificates in addition to annual and final technical reports.

## TABLE OF CONTENTS

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### Summary of Program Requirements

- I. **Introduction**
- II. **Program Description**
- III. **Eligibility Information**
- IV. **Award Information**
- V. **Application Preparation and Submission Instructions**
  - A. Application Preparation Instructions
  - B. Budgetary Information
  - C. Due Dates
  - D. FastLane Requirements
- VI. **Proposal Review Information**
  - A. NSF Proposal Review Process
  - B. Review Protocol and Associated Customer Service Standard
- VII. **Award Administration Information**
  - A. Notification of the Award
  - B. Award Conditions
  - C. Reporting Requirements
- VIII. **Contacts for Additional Information**
- IX. **Other Programs of Interest**

## I. INTRODUCTION

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BIO offers postdoctoral research fellowships in selected areas of biology to provide opportunities for recent doctoral scientists to obtain additional training, to gain research experience under the sponsorship of established scientists, and to broaden their scientific horizons beyond their research experiences during their undergraduate or graduate training. Fellowships are further designed to assist new scientists to direct their research efforts across traditional disciplinary lines and to avail themselves of unique research resources, sites, and facilities, including foreign locations. NSF postdoctoral fellowships are awards to individuals, and applications are submitted directly by the applicant to the NSF. Fellows must affiliate with an appropriate research institution and are expected to devote themselves full time to the fellowship activities for the duration of the fellowship. At the conclusion of the fellowship, a Fellow who accepts a tenure-track appointment at a U.S. institution eligible to receive NSF funds may apply for a research starter grant through that institution.

This program is a continuation of a 5-year program started in 1999. NSF continues to have an important role in the support of research and training in biological informatics. These fellowships in biological informatics support recent Ph.D. recipients to conduct research and obtain training to develop and use computational, statistical, and other informatics tools to address problems across the full range of biology supported by BIO.

BIO expects to make 15 fellowships and 5 starter grants per year in fiscal years 2004, 2005, and 2006.

## II. PROGRAM DESCRIPTION

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Biological informatics is characterized as developing new tools and making innovative use of existing quantitative tools to synthesize and integrate existing, often heterogeneous, types of data and answer emerging and historically challenging questions in biology. Since biological informatics has grown NSF seeks to further expand postdoctoral training in biological informatics. It is expected that the Fellows trained through these fellowships will play an important role in training the future workforce at all occupational levels. Cross-disciplinary postdoctoral training will assist the Fellows to establish careers in informatics and biology.

Applicants for the fellowships must propose leading-edge research in biology, include a strong linkage between information/computational science and biology, and develop and/or apply leading-edge informatics/computational tools or approaches to the stated biological problem. Applications are expected to address how the research will advance the field and to be characterized by one or more of the following:

- Be based on empirical data. Usually these data are already available; if additional data are needed, it is clearly explained why and how they would be collected.
- Involve large quantities of data.
- Integrate or synthesize disciplines from biology (broadly defined) and information (computer sciences, mathematics, statistics) sciences.
- Make innovative use of existing technology and/or mathematical/statistical techniques.
- Define and leverage existing methods and tools, or recognize and secure the needed expertise when method or tool development is proposed.

Applications that do not follow this guidance will be returned without review.

Applicants are reminded that NSF does not support research with disease-related goals, including the etiology, diagnosis, or treatment of physical or mental disease, abnormality, or malfunction in humans or animals. Animal models of such conditions or the development or testing of drugs or other procedures for their treatment also are not eligible for support. Applications with a biomedical focus are returned without review.

Abstracts of research and training previously supported by this program can be viewed by individual fiscal years at <http://www.>

[nsf.gov/bio/dbi/dbitraining.htm](https://www.nsf.gov/bio/dbi/dbitraining.htm). During the extension of this program it is expected that areas supported will include, but not be limited to, network and pathway analysis, data mining and natural language processing, and data and information integration.

#### A. Location of Work

Research and training supported by these fellowships may be conducted at any appropriate nonprofit U.S. or foreign host institution. Appropriate institutions include colleges and universities, and private nonprofit institutes and museums. Private and public for-profit organizations (i.e. industry) may be suitable if they provide an institutional contribution to cover the institutional and special allowances (see below) and do not place any intellectual property limitations on the Fellow's activities. This fellowship is one of the mechanisms through which BIO offers support for Grant Opportunities for Academic Liaison with Industry (GOALI), NSF 98-142. Because the objectives of the fellowships include broadening the perspectives and experiences of the Fellows and promoting interdisciplinary research careers, careful consideration should be given to the selection of the sponsoring scientists and host institutions.

The NSF encourages Fellows to gain international experience by selecting foreign hosts for at least part of the tenure of the fellowship. Applicants who plan to spend more than one year of the fellowship in a sponsoring laboratory overseas may request a 3-year fellowship that includes the final year at a U.S. laboratory after the foreign tenure. Both the foreign and U.S. locations must be identified in the application. Preference will be given to applicants who choose foreign locations and those moving to new institutions and research environments with which they have had no prior affiliation.

#### B. The Sponsoring Scientist(s)

The Fellow must affiliate with a host institution during the entire tenure of the fellowship. The applicant is responsible for making prior arrangements with the host institution and sponsoring scientist(s). Regardless of the number of sponsors or locations, the fellowship application requires a single sponsoring scientist statement. If more than one sponsor is proposed, one must be named lead sponsor and information from all must be integrated into a single statement. Likewise, if more than one site is proposed, the sponsoring scientist statement must integrate all sponsors and locations in a single statement. Because of the multidisciplinary focus of the fellowships, it is expected that dual sponsorship will be common. An important basis for judging the suitability of the host institution is the degree to which the sponsoring scientist statement describes and offers a research environment and mentoring opportunity that could not be obtained without fellowship support.

If a fellowship is offered, the applicant may be requested to provide documentation from the host institution that the terms and conditions of the fellowship are acceptable and that the Fellow will be provided adequate space, basic services, needed resources, and supplies.

Any changes in location or sponsorship during the fellowship must be approved in advance in writing by the Fellowship Coordinator

### **III. ELIGIBILITY INFORMATION**

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You are eligible to apply for this Postdoctoral Research Fellowship if you meet all of the following eligibility criteria:

1. You are a citizen, national, or lawfully admitted permanent resident alien of the United States.
2. You have earned the doctoral degree or plan to earn it within 12 months following the deadline and you have served as a postdoctoral researcher for no more than 24 months (full-time equivalent) before the deadline.
3. You are proposing a host institution(s) different from your doctoral institution and a sponsoring scientist(s) different from

your thesis advisor and your current supervisor, i.e., you cannot remain in your current lab.

4. You are proposing a research and training plan in biological informatics as defined in Section II in this program solicitation.
5. You have not been, and are not at the time of your award, a principal investigator or co-principal investigator on a Federal research grant of more than \$20,000, not including pre- or postdoctoral fellowships.
6. The research you propose for the fellowship is not duplicated in another submission to NSF (except the International Research Fellowship Program) and, while your fellowship application is pending, is not submitted to NSF regardless of who is named principal investigator. If, in the program staff's judgment, the submitted research is substantially identical to the research in another application to NSF, including research proposals, the fellowship application will be returned without review.

#### IV. AWARD INFORMATION

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NSF expects to award approximately 15 fellowships, depending on the quality of the submissions and the availability of funds in fiscal years 2004, 2005, and 2006. Approximately 5 research starter grants will be made each year. The total in each year is expected to be \$1.15 million.

##### A. Duration and Tenure

The fellowship tenure is for 24 continuous months except when the Fellow spends more than a year abroad. In this case, the original application may request a 36-month tenure where the last 12 months may be spent in a U.S. laboratory. Tenure begins on the first of the month only and may commence at the Fellow's request between November and March. Interruptions in tenure or extensions without additional cost to NSF are permitted only for extenuating circumstances beyond the control of the Fellow. Fellowships are not renewable.

##### B. Stipend and Allowances

The total fellowship amount is \$60,000 per year and consists of three types of payments. The stipend is \$45,000 per year paid monthly at the rate of \$3,750 directly to the Fellow as an electronic funds transfer into a personal account at a financial institution. A research allowance of \$10,000 per year is paid as a lump sum to the Fellow at the beginning of the Fellowship in the same manner for expenses directly related to the conduct of the research, such as materials and supplies, subscription fees and recovery costs for databases, travel, and publication expenses. An institutional allowance of \$5,000 per year is paid to the host institution for fringe benefits, including health insurance for the Fellow, and for expenses incurred in support of the Fellow, such as space, equipment, and general-purpose supplies.

The fellowship amount can be increased to include a Facilitation Award for Scientists and Engineers with Disabilities (FASSED) and joint funding with the International Research Fellowship Program (IRFP) but otherwise cannot be increased or supplemented. When requesting FASSED and IRFP funding, applicants should contact the BIO Postdoctoral Fellowship Program prior to applying.

##### C. Cost Sharing is not required in applications submitted under this Program Solicitation.

**Indirect Cost (F&A) Limitations:** Fellowships are awards to individuals and have no indirect costs. Research starter grants allow no indirect costs.

**Other Budgetary Limitations:** The fellowship award amount is usually \$120,000 for two years or \$180,000 for 3 years. For research starter grants, NSF provides up to \$50,000 depending on the amount of start-up funds provided by the institution to

the former Fellow.

## V. APPLICATION PREPARATION AND SUBMISSION INSTRUCTIONS

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### A. Application Preparation Instructions

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#### **Application Instructions:**

Include all the requested information and documentation but do not include anything that is not specifically requested. Page limits include pictures, figures, tables, graphics, etc. Font size must be no smaller than Courier New 10 and margins must be at least 2.5 cm. Proposals that don't conform to these requirements and all page limitations are returned without review. Proposals must be submitted electronically via NSF FastLane. Only complete and timely applications will be accepted.

Use of NSF FastLane to prepare and submit the application requires specific software. Applicants, sponsoring scientists, and reference writers should consult [www.fastlane.nsf.gov/a1/pdfcreat.htm](http://www.fastlane.nsf.gov/a1/pdfcreat.htm) for current requirements.

#### 1. Fellowships

The deadline for submitting applications is 5:00 p.m., submitter's local time, on the second Monday in April in 2004, 2005, and 2006. The deadlines dates are April 12, 2004; April 11, 2005; and April 10, 2006. Only one application is permitted per person each year.

A complete application requires input from the applicant, the sponsoring scientist(s) statement, and 2 references (one from the doctoral thesis advisor). Applicants are advised to begin the application well in advance of the deadline and to submit the application as soon as possible. FastLane allows applicants, sponsors, and references to work on parts of the application and to save them for future completion and submission.

To use FastLane, go to the NSF Web site <http://www.nsf.gov/> and select "FastLane" or directly to the FastLane home page <http://www.fastlane.nsf.gov/>. Click on "Postdoctoral Fellowships." Click on applicant, sponsor, or reference as appropriate, then select Postdoctoral Research Fellowships in Biological Informatics. Then click on "How to apply." Please follow the directions. Applicants must first register as an individual researcher before they or their references gain access to the application and reference procedures.

In FastLane, the applicant must complete the following:

- (1) application form
- (2) applicant's Curriculum Vitae (CV) limited to 2 pages;
- (3) an abstract of the proposed research including its broader impact (limited to one page);
- (4) research and training plan (limited to 5 pages, including all figures, tables, etc.) with its own bibliography (no page limit); and
- (5) abstract of the dissertation research (limited to one page); and must also upload the sponsoring scientist(s) statement into the application.

These instructions are addressed to applicants. The research and training plan addresses the research you'll conduct and the training and educational activities, including teaching, you'll undertake during the fellowship period and how they relate to your career goals. It is uploaded into FastLane. When printed out, it must not exceed 5 pages plus the bibliography. All figures, tables, pictures, etc. are included in the 5-page limit and the plan must have margins no smaller than 2.5-cm and a font no smaller than Courier New 10. Applications must strictly adhere to page limitations, font size, and margins. Non-conforming proposals are not accepted. Include in the research and training plan: 1) a brief and informative introduction or background section; 2) a statement of research objectives, methods, and significance; 3) training objectives (these may include scientific as well as other career preparation activities); 4) an explanation of how the fellowship activities will enhance your career development; and 5) a justification of the choice of sponsoring scientist(s) and host institution(s).

Some applications may require other documentation before the final decision can be made, e.g., government permits, letters of collaboration, and commitments from private sources. They should not be included in the application but may be requested later. Their availability should be noted in the research and training plan.

The sponsoring scientist(s) statement is meant to show how the proposed host(s) and host institution(s) provide the best environment for your proposed research and training plan and form the basis for a future independent research career. If there are multiple sponsors, one integrated statement must be developed and submitted.

Remind your sponsoring scientist that a complete sponsoring scientist statement consists of 2 parts, a single discussion of the following 5 items and a CV of no more than 2 pages for each sponsor:

- A brief description of the research projects in the host research group(s).
- A statement of current and pending research support, both private and public, for each sponsor. If any sponsor has submitted similar research for funding, what is the degree of overlap?
- An explanation of how the research and training plan of the applicant would fit into and complement ongoing research and what role the sponsor(s) will play in the proposed research and training.
- How the sponsor(s) plan to foster the development of the applicant's future independent research career.
- Personnel with whom the Fellow would work.

You upload the sponsoring scientist statement into your application.

To be complete, your application must also include the 2 references as listed on your application form. One should be your thesis advisor. Do not use your sponsoring scientist as a reference. Your references will need your FastLane-assigned temporary proposal number and a password that you assign. FastLane permits you to send them an email with this information or you can provide it to them directly. They must change the password the first time they login to the reference module. They complete a reference form in FastLane, upload a recommendation letter, and then submit the reference.

## 2. Research starter grants

Fellows who elect to pursue an academic career and accept a tenure-track position at a U.S. institution eligible to receive NSF funding following their fellowships may apply for a special one-year, nonrenewable starter grant to assist in setting up an independent research program.

Unlike fellowships, research starter grants are not awards to individuals. Proposals from former Fellows for research starter grants are submitted through the sponsored research office at the employing institution using FastLane as for all research grant proposals.

Instructions for starter grants are found in FastLane under "How to Apply." Starter grant proposals are assigned to the appropriate research programs for scientific review and decision by the cognizant NSF Program Officer. The maximum amount for a starter grant is \$50,000; the amount is based on the amount of start up funds with NSF providing \$1 for each \$2 of start up funds from the institution. Neither of these funds can be used for PI salary, renovations of laboratory or office space, or indirect costs. The funds are to be used for starting research that falls under the purview of BIO.

## B. Budgetary Information

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### Cost Sharing:

Cost sharing is not required in proposals submitted under this Program Solicitation.

### Budget Preparation Instructions:

- Cost Sharing Requirements: Cost Sharing is not required for fellowships and research starter grants.
- Indirect Cost (F&A) Limitations: Indirect costs are not paid on fellowships and research starter grants.
- Other Budgetary Limitations: The fellowship award amount is \$60,000 per year for two or three years as determined when the fellowship is offered. For research starter grants, NSF provides up to \$50,000 depending on the amount of start-up funds provided by the institution to the former Fellow.

## C. Due Dates

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Applications must be submitted by the following date(s):

### Application Deadline(s) (due by 5 p.m. submitter's local time):

Second Monday in April

April 12, 2004; April 11, 2005; and April 10, 2006. Research starter grant proposals may be submitted at any time between September and March

## D. FastLane Requirements

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Applicants are no longer required to provide a paper copy of the signed Proposal Cover Sheet to NSF. Further instructions regarding this process are available on the FastLane Website at: <http://www.fastlane.nsf.gov/>

## VI. APPLICATION REVIEW INFORMATION

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### A. NSF Application Review Process

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An advisory panel consisting of biologists, information and computer scientists, mathematicians, and statisticians, among others, will review the applications. In some cases, mail reviews may be used to supplement the expertise of the advisory panel. NSF Program Officers select the reviewers and panelists. Care is taken to ensure that reviewers have no conflicts with applicants and sponsoring scientists. Special efforts are made to recruit reviewers from a wide variety of institutions and disciplines related to that principally addressed in the application. Applicants need to be aware that the make-up of the panel necessitates that the proposal be written for both the specialist and an interdisciplinary reader. The NSF will select the Fellows on the basis of the panel's recommendations, staff review, program priorities, the effect of the selections on the infrastructure of science in the U.S., and the NSF's education and human resource goals.

Proposals for research starter grants are not subject to external review but are reviewed by NSF program officers only.

The National Science Board approved revised criteria for evaluating proposals at its meeting on March 28, 1997 ([NSB 97-](#)

72). All NSF proposals are evaluated through use of the two merit review criteria. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

On July 8, 2002, the NSF Director issued [Important Notice 127](#), Implementation of new Grant Proposal Guide Requirements Related to the Broader Impacts Criterion. This Important Notice reinforces the importance of addressing both criteria in the preparation and review of all proposals submitted to NSF. NSF continues to strengthen its internal processes to ensure that both of the merit review criteria are addressed when making funding decisions.

In an effort to increase compliance with these requirements, the January 2002 issuance of the GPG incorporated revised proposal preparation guidelines relating to the development of the Project Summary and Project Description. Chapter II of the GPG specifies that Principal Investigators (PIs) must address both merit review criteria in separate statements within the one-page Project Summary. This chapter also reiterates that broader impacts resulting from the proposed project must be addressed in the Project Description and described as an integral part of the narrative.

Effective October 1, 2002, NSF will return without review proposals that do not separately address both merit review criteria within the Project Summary. It is believed that these changes to NSF proposal preparation and processing guidelines will more clearly articulate the importance of broader impacts to NSF-funded projects.

The two National Science Board approved merit review criteria are listed below (see the [Grant Proposal Guide](#) Chapter III.A for further information). The criteria include considerations that help define them. These considerations are suggestions and not all will apply to any given proposal. While proposers must address both merit review criteria, reviewers will be asked to address only those considerations that are relevant to the proposal being considered and for which he/she is qualified to make judgments.

#### **What is the intellectual merit of the proposed activity?**

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of the prior work.) To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

#### **What are the broader impacts of the proposed activity?**

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

Applicants and sponsoring scientists should address the following elements in their submissions to provide reviewers with the information needed to respond fully to both of the above-described NSF merit review criteria. NSF staff will give these elements careful consideration in making funding decisions.

NSF staff will give careful consideration to the following in making funding decisions:

#### ***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 learning perspectives.

#### ***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 -- is 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.

## **Additional Factors in Evaluation and Selection of Fellows**

Because one of the objectives of the program is to broaden the perspectives and experiences of the Fellows, careful consideration should be given to the selection of the Sponsoring Scientists and host institutions. The NSF encourages Fellows to gain international experience by selecting foreign hosts for at least part of the tenure of the fellowship.

Applicants are evaluated on their ability, accomplishments, and potential as evidenced by the CV and reference reports. The research and training plan is evaluated on its scientific merit, its feasibility, its significance in generating new knowledge, and its impact on the career development of the applicant. Other important evaluative factors are the suitability and availability of the sponsoring scientist(s) and host institution(s), including colleagues and facilities.

## **B. Review Protocol and Associated Customer Service Standard**

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As explained above, all fellowship applications submitted in response to this solicitation will be reviewed by panel review. The Fellowship Program Officer will be able to tell applicants if their applications will be declined or recommended for funding within six months of the deadline for 95 percent of applicants.

Reviewers will be asked to formulate a recommendation to either support or decline each proposal. The Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation.

A summary rating and accompanying narrative will be completed and submitted by each reviewer. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers, are sent to the Principal Investigator/Project Director by the Program Director. In addition, the proposer will receive an explanation of the decision to award or decline funding.

NSF is striving to be able to tell applicants whether their proposals have been declined or recommended for funding within six months. The time interval begins on the date of receipt. The interval ends when the Division Director accepts the Program Officer's recommendation.

In all cases, after programmatic approval has been obtained, the proposals recommended for funding will be forwarded to the Division of Grants and Agreements for review of business, financial, and policy implications and the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants and Agreements Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with a NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants and Agreements Officer does so at their own risk.

## **VII. AWARD ADMINISTRATION INFORMATION**

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### **A. Notification of the Award**

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Fellowship offers will be sent by email in August; other applicants will be notified of final decisions shortly thereafter. Copies of reviews and an explanation of the review process will be available through FastLane following the final decision. A Grants Officer in the Division of Grants and Agreements sends the award letter to the Fellow after acceptance of the offer.

Applicants are requested to send address and phone changes to [dbibi@nsf.gov](mailto:dbibi@nsf.gov).

For research starter awards, notification is sent to the submitting institution.

## **B. Award Conditions**

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An NSF fellowship consists of: (1) the award letter, which includes any special provisions applicable to the grant and any numbered amendments thereto; (2) the application; (3) the applicable grant conditions, see below; (4) this NSF program solicitation incorporated by reference in the award letter; (5) and an information booklet sent to successful applicants with the offer. Fellowships are awards to individuals and the Fellows are responsible for administering the fellowship.

NSF claims no rights to any inventions or writings that may result from its fellowship awards. However, Fellows should be aware that NSF, other Federal agencies, or private parties may acquire such rights through other grant support. Applicants are encouraged to discuss institutional policies on intellectual property rights with the host institution before submitting an application, as well as, the policies of the sponsoring scientist regarding what materials and projects must remain with the host institution, and which can be released to the Fellow at the end of the fellowship. Fellows at foreign institutions should be aware that specific provisions regarding allocations of intellectual property rights apply to particular countries, and Fellows should be cognizant of any such provisions before commencing work.

Fellows are obligated to include an acknowledgment of NSF support and a disclaimer in any publication arising from the fellowship-supported research.

Fellows are expected to agree to complete and open sharing of data and material in an expeditious manner. By submitting an application, it is understood that all participants agree to NSF guidelines on sharing of findings, data, and other research products. For further information, see the current issuance of the NSF Grant Proposal Guide (GPG), at <http://www.nsf.gov/cgi-bin/getpub?gpg>.

## **C. Reporting Requirements**

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For all fellowships, the Fellow must submit an annual project report to the Postdoctoral Fellowship Program Officer within 90 days following the anniversary of the start date. Within 90 days after termination of the fellowship, the Fellow is required to submit a final project report and a termination certificate (this form will be sent with the fellowship offer). The annual and final reports are sent to the Fellowship Program Officer or can be submitted in FastLane. There is no required format but Fellows are requested to report both on their research progress as well as their educational activities during the fellowship tenure, including mentoring and guiding students at all educational levels.

Failure to provide technical reports delays NSF review and processing of subsequent pending proposals for the Fellow.

Fellows are expected to maintain contact with the Postdoctoral Fellowship Program Officer after completing fellowship activities to permit evaluation of the success of the program in advancing scientific careers.

Research starter grants require a final project report submitted through FastLane. This system permits electronic submission and updating of project reports, including information on: project participants (individual and organizational); activities and findings; publications; and other specific products and contributions.

D. Research starter awards are administered through the employing institution in accordance with institutional and NSF policies.

## **VIII. CONTACTS FOR ADDITIONAL INFORMATION**

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General inquiries regarding this program should be made to:

- Carter Kimsey, Program Manager, Directorate for Biological Sciences, Division of Biological Infrastructure, 615 N, telephone: (703) 292-8470, fax: (703) 292-9063, email: [ckimsey@nsf.gov](mailto:ckimsey@nsf.gov)

For questions related to the use of FastLane, contact:

- FastLane Help Desk, telephone: 1-800-673-6188, email: [fastlane@nsf.gov](mailto:fastlane@nsf.gov)
- Nicole S Harris, Division of Biological Infrastructure, telephone: 703-292-8470, email: [biofl@nsf.gov](mailto:biofl@nsf.gov)

## IX. OTHER PROGRAMS OF INTEREST

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The NSF *Guide to Programs* is a compilation of funding for research and education in science, mathematics, and engineering. The NSF *Guide to Programs* is available electronically at <http://www.nsf.gov/cgi-bin/getpub?gp>. General descriptions of NSF programs, research areas, and eligibility information for proposal submission are provided in each chapter.

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