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Developmental and Learning Sciences (DLS)

A Multidisciplinary Program of the Children's Research Initiative

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Program Announcement

NSF 02-008

DIRECTORATE FOR SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES
DIVISION OF BEHAVIORAL AND COGNITIVE SCIENCES

FULL PROPOSAL TARGET DATE(S):

January 15 of each year

July 15 of each year

February 1 of each year **Deadline for research center applications**

NATIONAL SCIENCE FOUNDATION

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SUMMARY OF PROGRAM REQUIREMENTS

GENERAL INFORMATION

Program Title: Developmental and Learning Sciences (DLS)

Synopsis of Program:

This program supports studies that increase our understanding of cognitive, linguistic, social, cultural, and biological processes related to children's and adolescents' development. Additional priorities are to support developmental research that: incorporates multidisciplinary, multi-method, microgenetic, and longitudinal approaches; develops new methods and theories; examines transfer of knowledge from one domain to another and from one situation to another; assesses peer relations, family interactions, social identities, and motivation; examines the impact of family, school, and community resources; assesses adolescents' preparation for entry into the workforce; and investigates the role of demographic characteristics and cultural influences on children's development. Research supported by this program will add to our basic knowledge of how people learn and the underlying developmental processes that support learning, with the objective of leading to better educated children and adolescents who grow up to take productive roles as workers and as citizens.

Cognizant Program Officer(s):

- Dr. Marguerite Barratt, Developmental & Learning Sciences, Program Director, Social, Behavioral & Economic Sciences, Division of Behavioral & Cognitive Sciences, Room 995, telephone: (703) 292-8732, e-mail: mbarratt@nsf.gov.

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

- 47.075 --- Social, Behavioral and Economic Sciences

ELIGIBILITY INFORMATION

- **Organization Limit:** For center applications only, the submitting and lead institution must be a doctoral degree-granting institution.
- **PI Eligibility Limit:** None
- **Limit on Number of Proposals:** None

AWARD INFORMATION

- **Anticipated Type of Award:** Standard or Continuing Grant
- **Estimated Number of Awards:** 20-30
- **Anticipated Funding Amount:** Approximately $5M annually, subject to the availability of funds.

PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

- **Full Proposals:** Deviations From Standard Preparation Guidelines
    - The program announcement/solicitation contains deviations from the standard Grant Proposal Guide (GPG) proposal preparation guidelines. Please see the full program announcement/solicitation for further information.

B. Budgetary Information

- **Cost Sharing Requirements:** Cost Sharing is Specialized. Please see the full program solicitation for further information.
- **Indirect Cost (F&A) Limitations:** None
- **Other Budgetary Limitations:** Other budgetary limitations apply. Please see the full program announcement/solicitation for further information.

C. Deadline/Target Dates

- **Letters of Intent (*optional*):** None
- **Preliminary Proposals (*optional*):** None
- **Full Proposal Target Date(s):**

January 15 of each year

July 15 of each year

February 1 of each year **Deadline** for research center applications

D. FastLane Requirements

- **FastLane Submission:** Required
- **FastLane Contact(s):**
    - BCSFASTLANE@NSF.GOV.

PROPOSAL REVIEW INFORMATION

- **Merit Review Criteria:** National Science Board approved criteria. Additional merit review considerations apply. Please see the full program announcement/solicitation for further information.

AWARD ADMINISTRATION INFORMATION

- **Award Conditions:** Standard NSF award conditions apply.

- **Reporting Requirements:** Additional reporting requirements apply. Please see the full program announcement/solicitation for further information.

I. INTRODUCTION

I. INTRODUCTION

America's success in this new century requires that our youth grow up to take productive roles as workers and as citizens. Key elements of this success are the developments that undergird effective learning, including children's and adolescents' cognitive, linguistic, social, cultural, and biological development. Adaptive learning in the 21st century cannot be focused on acquiring a limited set of skills or bodies of knowledge that may become dated or obsolete. Rather, learning in the 21st century must focus on flexibility in acquiring new knowledge and skills, on the transfer of knowledge and skills from one situation to another, and on creative problem-solving. Learning begins early in a child's life, long before school entry, and is a lifelong developmental process.

The current picture of children's learning and development is mixed. In 1997, a National Science and Technology Council report, *Investing in our Future: A National Research Initiative for America's Children for the 21st Century,* outlined significant advances in scientific knowledge on child and adolescent development. At the same time, this report emphasized that many challenges to understanding learning and development remain. For example, American children's reading and science test scores are improving but still fall short of the test performance of children in other industrialized countries. The extraodrinary demographic and technological changes of recent decades have further challenged our fundamental knowledge about children's learning and development. A solid body of research on children's learning and development, including studies of the early learning years and extending through the adolescent years, is necessary for improvements in the future prospects for youth.

II. PROGRAM DESCRIPTION

The purpose of this announcement is to inform the research community that support for research on integrative developmental science will receive added emphasis via funding through the Children's Research Initiative (CRI). The competition is intended to stimulate integrative, multidisciplinary approaches to the study of cognitive, linguistic, social, cultural, and biological processes of development.

PROGRAM OBJECTIVES

The primary objective of the Developmental and Learning Sciences Program is to support research that focuses on the mechanisms of development that explain when and how children and adolescents acquire new skills and knowledge and to elucidate the underlying developmental processes that support learning.

Human development research has been conducted traditionally in terms of disparate processes (e.g., perception, action, memory), separate levels of analysis (e.g., behavioral, social, neural), and different time scales (development, learning, action), all largely within separate subdisciplines. However, to understand the complexity of human behavior requires unified explanations of development, which current and developing tools and technologies of science are

now making possible. Explanations that are based on research evidence are needed to integrate the traditional knowledge domains and levels of analysis. The requirements for such integrative research are at the scale of: (1) development, plasticity, adaptation, and social, interpersonal, and family experiences; (2) enduring effects; (3) conceptual frameworks and mathematical models for systems descriptions; (4) different levels of the nervous system, (5) coherence among multiple system component parts; (6) the developmental interplay between genes and environment as they contribute to normal variation in cognition and learning; (7) social and evolutionary perspectives; and (8) experience/statistics of neural tuning and the relationship to behavior. Although any single research project is unlikely to incorporate all of the above issues, research on complex systems has the goal of integrating at least subsets of these issues.

Developmental research needs to become more integrated in focus and draw relevant fields together for interdisciplinary collaborations. Fields such as cognitive science and neuroscience, for example, have made important advances through their joint efforts.

The current need is to generate new approaches to research on complex human systems by studying the contexts of human development, ecological factors, and a variety of interactive phenomena that impact human growth and development. Since there is presently a diversity of methodologies across the separate research disciplines that comprise human developmental sciences, there is a need to focus on ways to integrate qualitative and quantitative methods across the sciences.

There is also a need to develop mechanisms to make collaborations and data sharing easier among researchers. National databases and longitudinal studies can foster interdisciplinary collaborations and uses of cross-disciplinary data, promote broader exploration of testable questions across datasets, increase the quality of data by maintaining accurate and uniform records, and promote cost-effectiveness through the sharing of research data. Furthermore, databases that are built from representative samples of the changing national population have the potential to broaden the scope and power of research findings.

RESEARCH PRIORITIES

The Developmental and Learning Sciences Program encourages research that will increase scientific understanding of fundamental developmental processes, including cognitive, linguistic, social, and biological (e.g., neural, hormonal) processes of learning and development. Priority will be given to studies addressing one or more of the following:

- Fundamental research on developmental processes during the perinatal and prenatal periods, infancy, childhood, adolescence, and young adulthood.
- Studies of the relationships among biological, cognitive, linguistic, social, and emotional aspects of human development over the life course.
- Developmental cognitive neuroscience research on how people learn, neurologic pathways and brain adaptability, and experiential and environmental factors that stimulate development.

- Development of higher-order cognitive processes, including critical thinking, communication, memory, language, mental representation, and other processes that maximize learning potential.

- Relations between the development of specific and general forms of knowledge; age-related changes in the processes of transfer of knowledge in one domain to children's understanding of another domain.

- Multidisciplinary, multi-method, microgenetic, and longitudinal approaches to the study of development during childhood and adolescence, including ethnographic research.

- Use of molecular genetics data to inform the study of continuities and discontinuities in development.

- Development of new methods, models, and theories for studying learning and development.

- Relations of children's and adolescents' development of peer relationships, family interactions, social identities, and motivation.

- Studies of the multiple influences on children's development, including the impact of family, school, community resources, and social institutions on the learning and development of children and adolescents.

- Research on how development is mediated by peers, social institutions, the media, and popular culture.

- Relations of adolescents' development to their preparation for entry into the workforce.

- The role of cultural influences and demographic characteristics (e.g., children's socioeconomic status, ethnicity, immigrant status, gender) on development; and the role of culture as internal processes (e.g., value perspectives, construction of meaning, etc.)

The above listing of priorities indicates that funding will be available for a wide range of topics; however, studies must be clearly linked to the primary objective of understanding the mechanisms of human development that support children's acquisition of new knowledge and skills.

FUNDING OPPORTUNITIES

(1) INDIVIDUAL INVESTIGATOR RESEARCH PROJECTS. It is recognized that many research topics are studied most effectively by individual research scientists or by small teams of collaborating investigators. Individual investigators are invited to submit proposals that address the research priorities listed above (also see *Investing in our Future: A National Research Initiative for America's Children for the 21st Century*. Executive Office of the President, OSTP, April 1997. It is available at: http://www.OSTP.gov/Children/Report.html).

(2) CENTERS. A second funding opportunity is for collaborators to create research centers for

purposes of conducting multidisciplinary, integrative research on scales larger than might be possible through individual research projects. Centers provide rich environments that combine research perspectives from multi-disciplinary areas. Centers are required to show how they: 1) enhance the content knowledge of the field; 2) build an intellectual infrastructure within and among disciplines; and 3) build a program of research in relevant aspects of developmental, learning, and human sciences.

Centers may vary in size and exhibit diverse forms of organization. No single type of center fits the needs of every group of collaborators. Rather, the size, structure, and operation of a Children's Research Initiative center will be determined by the proposed research, education, and knowledge transfer activities. While each center will be unique in some respects, each must meet the following requirements:

- Be based in a doctoral degree-granting academic institution;
- Be directed by a faculty member and integrated into the academic programs;
- Reflect commitment to achieving strategic goals shared by the host and partnering institutions asdemonstrated by institutional commitments;
- Provide a variety of education and research opportunities for U.S. students and faculty (e.g., undergraduate and graduate students, postdoctoral researchers, students from groups underrepresented in human sciences, K-12 teachers, and visiting participants);
- Have significant intellectual exchange and resource linkages among various collaborators to facilitate knowledge transfer (e.g., colleges and universities such as minority-serving institutions, community colleges, EPSCoR institutions, research laboratories, etc.);
- Include career broadening experiences as appropriate to the research areas (e.g., industrial, national or international laboratory internships, etc.);
- Include a management plan for monitoring the center's activities; and
- Have annual budgets up to $500,000 of NSF support for 3 to 5 years

Any institution or a group of institutions that fulfills the preceding requirements may submit a proposal for a center grant. Minority-serving, rural, and comprehensive institutions of higher education that have faculty and researchers in areas of developmental sciences are encouraged to submit proposals.

(3) WORKSHOPS AND SMALL CONFERENCES. Workshops and small conferences are useful for assessing the research needs of the field and for planning ways to address research gaps. Workshop and conference proposals will be awarded on a one-time basis.

III. ELIGIBILITY INFORMATION

The categories of proposers identified in the Grant Proposal Guide are eligible to submit proposals under this program announcement/solicitation.

Proposals submitted in response to this announcement will be accepted from colleges, universities, and other not-for-profit institutions in the U.S. with research and education programs in any area normally supported by NSF.

Organization Limit: **For center applications only, the submitting and lead institution must be a doctoral degree-granting institution.**

IV. AWARD INFORMATION

Estimated program budget, number of awards and average award size/duration are subject to the availability of funds.

The following different types of grant mechanisms will be available:

Individual Investigator Awards
· Anticipated Type of Award: Standard and Continuing grants
· Estimated Number of Awards: 15 - 20

Center Grants
· Anticipated Type of Award: Continuing grants
· Estimated Number of Awards: 1-3 awards

Workshops and Small Conferences
· Anticipated Type of Award: Standard grants
· Estimated Number of Awards: 5 - 8

Anticipated Funding Amount: Award durations of one to five years will be considered. It is anticipated that about $5 million will be available annually, depending upon the availability of funds.

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Full Proposal:

Proposals submitted in response to this program announcement/solicitation should be prepared and submitted in accordance with the general guidelines contained in the NSF *Grant Proposal Guide* (GPG). The complete text of the GPG is available electronically on the NSF Web Site at: http://www.nsf.gov/cgi-bin/getpub?gpg. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from pubs@nsf.gov.

Individual investigator projects must follow the guidelines of the Grant Proposal Guide. Special requirements for center grants and workshops and small conferences are indicated below.

Center grant project descriptions should not exceed 15 pages, but may include up to 5 additional pages for describing plans for monitoring the center's activities. Proposal project

descriptions should include the following information: 1) a description of the need addressed; 2) evidence that the institutional capacity has been enhanced; 3) documentation that partnerships have been established and/or strengthened; 4) the individual science projects supported by center activities. **Center grants must have the words "Center Grant" in the title.** *Please note additional review criteria for center proposals.*

Workshops and conference proposals project descriptions must not exceed 10 pages and should not include appendices. Workshops and conference proposals should include the following information: 1) description of the needs addressed; 2) proposed solutions for addressing the needs; 3) meeting agenda and list of participants who will attend the meeting; and 4) plans for a consensus document that presents a research agenda and recommendations for future research in the area(s) addressed. Final reports will include 1) a description of the need addressed; 2) evidence that the institutional capacity has been enhanced; and 3) documentation that partnerships have been established and/or strengthened.

Proposers are reminded to identify the program solicitation number (NSF-02-008) in the program announcement/solicitation block on the proposal Cover Sheet (NSF Form 1207). Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

B. Budgetary Information

Cost-sharing: **Cost-sharing of 10% of the total funds requested from NSF is required for center proposals only.**

The proposed cost sharing must be shown on Line M on the proposal budget. Documentation of the availability of cost sharing must be included in the proposal. Only items which would be allowable under the applicable cost principles, if charged to the project, may be included as the awardee's contribution to cost sharing. Contributions may be made from any non-Federal source, including non-Federal grants or contracts, and may be cash or in-kind (see OMB Circular A-110, Section 23). It should be noted that contributions counted as cost-sharing toward projects of another Federal agency may not be counted towards meeting the specific cost-sharing requirements of the NSF award. All cost-sharing amounts are subject to audit. Failure to provide the level of cost-sharing reflected in the approved award budget may result in termination of the NSF award, disallowance of award costs and/or refund of award funds to NSF.

Indirect Cost (F&A) Limitations: None

Other Budgetary Limitations:

Individual Investigator projects are anticipated to have annual budgets (total costs) in the $75,000 to $120,000 range, depending upon the research requirements. Annual budgets that exceed these amounts that are well-justified will be considered. Research support can be requested for up to 5 years. Support is available for, but not limited to: staff release time, consultants' fees, travel, computer network time, research costs, and related costs for materials and supplied.

Center proposals may request up to $500,000 of NSF support annually for 3-5 years. Center Directors may be asked to meet in Washington, D.C. for an annual Center Directors' conference. Expenses to travel to this meeting should be included in centers' annual budgets.

Workshops and small conferences are anticipated to have budgets (total costs) in the $10,000 to $15,000 range, depending upon the size of the meeting. Budgets that exceed these amounts that are well-justified will be considered.

C. Deadline/Target Dates

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

Full Proposals:

January 15 of each year	
July 15 of each year	
February 1 of each year	**Deadline** for research center applications

D. FastLane Requirements

Proposers are required to prepare and submit all proposals for this Program Announcement through the FastLane system. Detailed instructions for proposal preparation and submission via FastLane are available at: http://www.fastlane.nsf.gov/a1/newstan.htm. For FastLane user support, call 1-800-673-6188 or e-mail fastlane@nsf.gov.

Submission of Electronically Signed Cover Sheets. The Authorized Organizational Representative (AOR) must electronically sign the proposal Cover Sheet to submit the required proposal certifications (see Chapter II, Section C of the Grant Proposal Guide for a listing of the certifications). The AOR must provide the required certifications within five working days following the electronic submission of the proposal. Further instructions regarding this process are available on the FastLane website at: http://www.fastlane.nsf.gov.

VI. PROPOSAL REVIEW INFORMATION

A. NSF Proposal Review Process

Reviews of proposals submitted to NSF are solicited from peers with expertise in the substantive area of the proposed research or education project. These reviewers are selected by Program Officers charged with the oversight of the review process. NSF invites the proposer to suggest, at

the time of submission, the names of appropriate or inappropriate reviewers. Care is taken to ensure that reviewers have no conflicts with the proposer. Special efforts are made to recruit reviewers from non-academic institutions, minority-serving institutions, or adjacent disciplines to that principally addressed in the proposal.

Proposals will be reviewed against the following general review criteria established by the National Science Board. Following each criterion are potential considerations that the reviewer may employ in the evaluation. These are suggestions and not all will apply to any given proposal. Proposers are reminded that both the intellectual merit and the broader impacts of the work to be accomplished should be addressed. While reviewers are expected to address both merit review criteria, each reviewer will be asked to address only considerations that are relevant to the proposal and for which he/she is qualified to make judgements.

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?

Principal Investigators should address the following elements in their proposal to provide reviewers with the information necessary 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.

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 Review Criteria

The following review criteria apply to center proposals only.

Principal Investigators should address the following elements in their center proposals to provide reviewers with the information necessary 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.

In addition to the evaluation criteria stated above, NSF will consider the following additional criteria in making center awards. Excellence must be demonstrated in all criteria (general merit review criteria above and considerations specific to centers below) for support to be recommended:

Value of the Collaborative and Center-Mode to Research, Education, and Knowledge Transfer. Are the science and research challenges of sufficient import, scale, and complexity to justify a collaboration or center-mode investment? Will the partnerships achieve significant intellectual exchange? Will any proposed new instruments, shared experimental facilities, and/or databases be of significant value to a broad community of users? Will the educational programs make a special contribution to the achievement of a diverse, highly competent, and globally-engaged workforce and of an educated citizenry?

Integrative Nature of the Proposed Center. Are research, educational, and knowledge transfer activities strategically integrated such that the whole is greater than the sum of the parts? Are the partners vital participants in an integrated whole?

Leadership. Do the center director and the center leadership team convincingly demonstrate the vision, experience, and capacity to manage a complex, multi-faceted, and innovative research, education, and knowledge transfer enterprise?

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.

B. Review Protocol and Associated Customer Service Standard

All proposals are carefully reviewed by at least three other persons outside NSF who are experts in the particular field represented by the proposal. Proposals submitted in response to this announcement/solicitation will be reviewed by Mail Review followed by Panel Review.

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.

NSF is striving to be able to tell applicants whether their proposals have been declined or recommended for funding within six months for 70 percent of proposals. 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 its own risk.

VII. AWARD ADMINISTRATION INFORMATION

A. Notification of the Award

Notification of the award is made to *the submitting organization* by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program Division administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator. (See section VI.A. for additional information on the review process.)

B. Award Conditions

An NSF award consists of: (1) the award letter, which includes any special provisions applicable to the award and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award letter; (4) the applicable award conditions, such as Grant General Conditions (NSF-GC-1)* or Federal Demonstration Partnership (FDP) Terms and Conditions;* and (5) any announcement or other NSF issuance that may be incorporated by reference in the award letter. Cooperative agreement awards also are administered in accordance with NSF Cooperative Agreement Terms and Conditions (CA-1). Electronic mail notification is the preferred way to transmit NSF awards to organizations that have electronic mail capabilities and have requested such notification from the Division of Grants and Agreements.

*These documents may be accessed electronically on NSF's Web site at http://www.nsf.gov/home/grants/grants_gac.htm. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from pubs@nsf.gov.

More comprehensive information on NSF Award Conditions is contained in the NSF *Grant*

Policy Manual (GPM) Chapter II, available electronically on the NSF Web site at http://www.nsf.gov/cgi-bin/getpub?gpm. The GPM is also for sale through the Superintendent of Documents, Government Printing Office (GPO), Washington, DC 20402. The telephone number at GPO for subscription information is (202) 512-1800. The GPM may be ordered through the GPO Web site at http://www.gpo.gov.

C. Reporting Requirements

For all multi-year grants (including both standard and continuing grants), the PI must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period.

Center grants will include the following in their reports: 1) description of the need addressed; 2) evidence that the institutional capacity has been enhanced; 3) documentation that partnerships have been established and/or strengthened; and 4) reports on the individual science projects supported by center activities.

Workshop and small conference reports will include the following in their reports: 1)description of the needs addressed; 2) solutions proposed during workshop and conference deliberation; 3) meeting agenda; and 4) consensus report in the form of a research agenda and recommendations for future research.

Within 90 days after the expiration of an award, the PI also is required to submit a final project report. Approximately 30 days before expiration, NSF will send a notice to remind the PI of the requirement to file the final project report. Failure to provide final technical reports delays NSF review and processing of pending proposals for that PI. PIs should examine the formats of the required reports in advance to assure availability of required data.

NSF has implemented an electronic project reporting system, available 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. PIs will not be required to re-enter information previously provided, either with a proposal or in earlier updates using the electronic system.

VIII. CONTACTS FOR ADDITIONAL INFORMATION

General inquiries regarding Developmental and Learning Sciences should be made to:

- Dr. Marguerite Barratt, Developmental & Learning Sciences, Program Director, Social, Behavioral & Economic Sciences, Division of Behavioral & Cognitive Sciences, Room 995, telephone: (703) 292-8732, e-mail: mbarratt@nsf.gov.

For questions related to the use of FastLane, contact:

- BCSFASTLANE@NSF.GOV.

IX. OTHER PROGRAMS OF INTEREST

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.

Many NSF programs offer announcements or solicitations concerning specific proposal requirements. To obtain additional information about these requirements, contact the appropriate NSF program offices. Any changes in NSF's fiscal year programs occurring after press time for the *Guide to Programs* will be announced in the NSF E-Bulletin, which is updated daily on the NSF web site at http://www.nsf.gov/home/ebulletin, and in individual program announcements/solicitations. Subscribers can also sign up for NSF's Custom News Service (http://www.nsf.gov/home/cns/start.htm) to be notified of new funding opportunities that become available.

ABOUT THE NATIONAL SCIENCE FOUNDATION

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

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

Facilitation Awards for Scientists and Engineers with Disabilities (FASED) provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF-supported projects. See the program announcement/solicitation for further information.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Information Relay Service (FIRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation about NSF programs, employment or general information. TDD may be accessed at (703) 292-5090 or (800) 281-8749, FIRS at 1-800-877-8339.

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other NSF-published materials, please contact us at plainlanguage@nsf.gov.

PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to applicant institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies needing information as part of the review process or in order to coordinate programs; and to another Federal agency, court or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 63 Federal Register 267 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

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

OMB control number: 3145-0058.