NSF EPSCoR RESEARCH INFRASTRUCTURE IMPROVEMENT: ADVANCED MATERIALS AND MANUFACTURING

Request for Proposals

DEADLINE DATES:

Notices of Intent due: February 24, 2014

Last day for questions and answers about this RFP: March 27, 2014

Proposals due: April 10, 2014





THE BOARD OF REGENTS and THE NATIONAL SCIENCE FOUNDATION EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH (EPSCoR)

Issue Date: December 20, 2013

1201 North Third Street, Suite 6-200 Baton Rouge, Louisiana 70802 (225) 342-4253 www.laregents.org

I. INTRODUCTION

I.A. PURPOSE OF THIS RFP

The Louisiana Experimental Program to Stimulate Competitive Research (LA EPSCoR) solicits proposals in the area of Advanced Materials and Manufacturing with a focus on the development of strong interdisciplinary and multi-institutional collaborations that leverage major State investments in science and technology (S&T), particularly in cyberinfrastructure. The ultimate goal of the proposed effort is the development of a sustainable national center of excellence. A successful project must include compelling strategies for utilizing the diverse human, physical, and technological resources within Louisiana. Extensive strategic planning is required. To this end, proposals must feature meaningful involvement by multiple research campuses, including an explicit and transparent research role for minority-serving institutions and meaningful linkages to community colleges. Plans for ensuring diversity, mentoring of postdoctoral researchers, workforce development, outreach and communication, evaluation and assessment, and long-term sustainability are required.

Because a high level of planning, collaboration, and meaningful intellectual contributions will be required from project participants, individuals listed as Principal Investigator (PI) or Co-Principal Investigator (Co-PI) on a proposal cannot participate in another proposal submitted under this RFP. Prospective applicants are strongly encouraged to consult with their Vice President/Vice Chancellor for Research (VPR/VCR) regarding their planned proposal submission for this competition.

Proposals will be reviewed by an independent panel of out-of-state experts. The objective of this RFP is to identify a comprehensive initiative—encompassing research, cyberinfrastructure, education and outreach, workforce development, and other components as outlined in Section III.F—that can be incorporated as part of a five-year statewide Research Infrastructure Improvement (RII) Track 1 proposal. This proposal will be submitted by LA EPSCoR to the National Science Foundation (NSF) in early August, 2014. Funding for the statewide program is contingent upon Louisiana receiving an EPSCoR award. The program will be administered through the Board of Regents' (BoR) Office of Sponsored Programs and will operate under the auspices of the State EPSCoR Committee, led by the LA EPSCoR Project Director.

I.B. EPSCoR GOALS

The overarching goals of the EPSCoR program are: 1) to provide strategic programs and opportunities for EPSCoR participants that stimulate sustainable improvements in their R&D capacity and competitiveness; and 2) to advance science and engineering capabilities in EPSCoR states for discovery, innovation, and overall knowledge-based prosperity. NSF EPSCoR's Research Infrastructure Improvement (RII) program is designed to achieve these goals.

I.C. NSF SOLICITATION PENDING

Prospective applicants should note that NSF has not yet issued the EPSCoR RII Track-1 solicitation for fiscal year 2014. It is expected that the upcoming solicitation will be similar to the previous year's solicitation (NSF 13-549), which is available at: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503429. This RFP is based upon

the criteria contained in solicitation number NSF 13-549. If the new solicitation contains conditions or provisions that require specific changes to this RFP (including timeline), a notification will be posted to the BoR website at http://laregents.org and disseminated to the campuses through the EPSCoR Committee members and Vice Presidents/Vice Chancellors of Research (VPR/VCR).

II. PROGRAM DESCRIPTION

II.A. TARGET AREA

The State EPSCoR Committee has decided that a major component of the statewide EPSCoR proposal will consist of one competitively selected proposal in the area of Advanced Materials and Manufacturing that:

- builds upon existing research strengths and leverages State investments in science and technology;
- activates effective collaborations within Louisiana that advance scientific research, promote innovation, and benefit society;
- fosters meaningful interdisciplinary research and collaboration among Louisiana institutions;
- has the greatest potential to produce significant improvements in the State's science and technology enterprise;
- results in a research/education enterprise that is sustainable beyond the period of EPSCoR funding by securing funding from federal, private, and industrial partners/sources; and
- has the greatest potential to become a sustainable national center funded primarily through external sources.

The proposal must be focused on scientific and engineering research in Advanced Materials and Manufacturing; i.e., physics-based materials models to link manufacturing, production, design, and materials; smart materials; and multiscale systems and manufacturing. The proposed initiative should bring together a confluence of scientists and engineers to bridge the gaps that exist between theory, modeling and simulation, application, and production. The goal is to link the structure and composition of materials—extending the entire length scale—with their manufacturing and properties. Successful proposals will leverage the State's investments in computational resources, cyberinfrastructure, and advanced materials science. Proposals should establish strong linkages between institutions and the private sector. EPSCoR funds must be expended in Louisiana and cannot be transferred to other locations for these initiatives.

The proposed project must be scientifically meritorious and demonstrate meaningful interdisciplinary collaboration among Louisiana institutions involving multiple research institutions, including a significant role for minority-serving institutions and meaningful linkages to community colleges. Applicants must be able to demonstrate a pre-existing

critical mass as evidenced by a successful record of external research awards and peer-reviewed publications. To ensure maximum impact of EPSCoR funds, proposals must present a detailed strategy to generate subsequent, sustained non-EPSCoR funding from federal, State, or private sector sources.

II.B. FINANCIAL CONSIDERATIONS

The comprehensive, statewide NSF EPSCoR proposal, if successful, will result in an award to Louisiana in the form of a five-year grant. The BoR, as the award recipient, will act as the fiscal agent in disbursing project funds and will issue subcontracts to the lead institution and other institutions listed in the successful proposal. Approximately \$4 million per year is budgeted to fund the selected project. Funding is contingent upon Louisiana receiving an EPSCoR award. For this statewide competition, institutional matching funds are not required.

Indirect costs must be charged by each participating institution at the applicable indirect cost rate(s) negotiated with each institution's respective cognizant negotiating agency.

II.C. ELIGIBILITY CONSIDERATIONS

All public institutions of higher education, as well as accredited independent institutions of higher education that are members of the Louisiana Association of Independent Colleges and Universities, are eligible to submit proposals under this RFP. <u>Individuals listed as PI or Co-PI on a proposal cannot participate in another proposal</u>. Individuals listed as PI and Co-PIs on a proposal must hold a tenured or tenure-track faculty position at the submitting institution. Individuals who are <u>not</u> employed by an eligible institution may serve as consultants on proposals; however, they may not be listed as PIs or Co-PIs. The number of Co-PIs is limited to three (3).

II.D. PROJECT ORGANIZATION

The State EPSCoR Project Director (PD), who is also the BoR's Associate Commissioner for Sponsored Programs Research and Development, will direct and manage the statewide NSF EPSCoR award, and will have programmatic and budget authority as described in the NSF Proposal and Award Policies and Procedures Guide (PAPPG) and any special conditions imposed by NSF. As a component of the statewide EPSCoR program, the recommended project will be under the purview of the BoR.

II.E RELATIONSHIP TO STATEWIDE EPSCOR PROPOSAL

The recommended project will be incorporated as part of the comprehensive, statewide RII proposal to be submitted to the NSF in early August, 2014. Considerable effort will have to be made to integrate the recommended project into the full proposal. The lead investigators (PI and Co-PIs) of the recommended proposal must be available during the summer to integrate their projects into the comprehensive statewide proposal that the Board of Regents will ultimately submit to the NSF. Please plan accordingly. Failure to adhere to this crucial requirement will result in the elimination of the project from inclusion in the statewide proposal.

II.F. TIMETABLE (Dates may change, subject to requirements of FY2014 NSF RII Track-1 Solicitation)

December 20, 2013 Issuance of RFP

February 24, 2014 Notices of Intent due at BoR

March 27, 2014 Last day to answer questions concerning this RFP

April 10. 2014 Proposals due at BoR

April – May 2014 Proposal review

June - July 2014 Successful proposal incorporated into statewide

proposal

early August, 2014 Statewide proposal due at NSF

III. PROPOSAL SUBMISSION AND FORMAT REQUIREMENTS

III.A. GENERAL REQUIREMENTS

The applicant is responsible for any misunderstandings that occur because of incorrect proposal assembly and electronic submission to the BoR.

III.B. NOTICE OF INTENT REQUIRED

Before a proposal will be accepted, a notice of intent (NOI), using the form provided with this RFP, must be emailed to the BoR by the lead institution's authorized representative to im.gershey@la.gov in portable document format (pdf) no later than 4:30 p.m., Monday, February 24, 2014. An email acknowledging receipt of each NOI will be sent to the authorized institutional representative of the lead institution. NOIs submitted directly by individual PIs will not be accepted.

III.C. DEADLINES

The deadline for the receipt of the <u>Notice of Intent</u> is **4:30 p.m.**, **Monday**, **February 24**, **2014**. If a confirmation email is not received by the authorized institutional representative by noon on Tuesday, February 25, the NOI has not been received.

The deadline for receipt of <u>proposals</u> on the BoR server is **4:30 p.m. Thursday, April 10, 2014**. Failure to meet this deadline will invalidate the submission. The LOGAN proposal submission system is programmed to close at deadline cited in this RFP. Note that submission deadlines are absolute and that all campus work on the proposal, including final approval and submission to the Board of Regents by the designated campus office, must be completed on or before the deadline date and time.

III.D. ELECTRONIC SUBMISSION

The proposal **must** be submitted to the Board of Regents by the submitting institution's authorized representative. **Proposals directly submitted to the Board of Regents by individual Pls will not be accepted.** All online submissions must be uploaded as a single PDF document through the LOGAN system.

Instructions for PIs:

- 1. Go to URL: https://web.laregents.org/logan/index.pl.
- 2. Login using your LOGAN credentials.
 - a. If you are new user and do not have a LOGAN login, please click on "New user registration" to register.
 - b. If you have logged into LOGAN before and have forgotten your credentials please send an email to support@laregents.org.
- 3. After logging in, click on "EPSCoR Track-1 Proposals" and use the provided online form to select and upload the PDF document.
- 4. If upload is successful, send the proposal to your sponsored programs office by clicking the "Send Proposal to OSP/OSR". A proposal number will be assigned after the proposal is successfully sent to the PI's Office of Sponsored Programs/Research.
- 5. An email confirmation will be sent to the PI with the proposal number.
- 6. The OSP/OSR will review the proposal, and, if approved, send the proposal to the Board of Regents.

Instructions for the OSP/OSR:

- 1. Go to URL: https://web.laregents.org/logan/index.pl.
- 2. Login using your Institutional credentials.
- 3. Select "EPSCoR Track-1 Proposals".
- 4. Follow simple onscreen instructions to submit the proposal to the Board of Regents, EPSCoR office.
- 5. An email will be sent to both the PI and the OSP/OSR to confirm successful submission of the proposal.

If **both** the PI and the OSP/OSR do not receive confirmation emails within 12 hours, the proposal was not received. In that case, send an email to support@laregents.org.

III.E. TYPE SIZE AND FORMATTING

The proposal must conform to the following requirements, which are identical to NSF proposal preparation requirements, as noted in NSF 13-1, the NSF Proposal and Award Policies and Procedures Guide (PAPPG):

Use one of the following typefaces identified below:

- Arial11, Courier New, or Palatino Linotype at a font size of 10 points or larger;
- Times New Roman at a font size of 11 points or larger; or
- Computer Modern family of fonts at a font size of 11 points or larger.

A font size of less than 10 points may be used for mathematical formulas or equations, figures, table or diagram captions and when using a Symbol font to insert Greek letters or special characters. Pls are cautioned, however, that the text must still be readable.

No more than six lines of text within a vertical space of one inch.

Margins, in all directions, must be at least an inch.

III.F. PROPOSAL ELEMENTS

The proposal must contain the following elements, in the order presented here:

- 1. **Cover Sheet** Use cover sheet provided with this RFP. Do <u>not</u> attach institutional routing sheets or similar items.
- Summary (1 page maximum) Provide a clear vision for and description of the proposed RII Track-1 project and its potential impact. Briefly describe the proposed scope and the RII Track-1 project organization, activities in research and education and their integration. In separate statements provide a succinct summary of the intellectual merit and broader impacts of the proposed project.

3. Table of Contents

- 4. Project Description The Project Description, not to exceed twenty-five (25) pages, consecutively numbered, including text as well as visual materials, must include the following sections, each section clearly indicated by using the headings below in bold: Refer to NSF Program Solicitation NSF 13-549 for specific instructions for preparing each section. Please note that any changes to these instructions that are contained in the 2014 Track-1 Program Solicitation (which has not yet been issued by NSF), will take precedence.
 - (a) Status and Overview (3 pages maximum)
 - (b) Results from Relevant Prior NSF Support (2 pages maximum)
 - (c) Research and Education Program (17 pages maximum)
 - (d) Diversity Plan (2 pages maximum)
 - (e) Partnerships and Collaborations (3 pages maximum)
 - (f) Communication and Dissemination Plan (2 pages maximum)
 - (g) Sustainability Plan (4 pages maximum)
 - (h) **Management, Evaluation and Assessment Plan** (7 pages maximum) (this section must include Budget Table A, below:

Budget Table A: Research Support Levels (\$K)

Awardee	Year 1 (\$K)	Year 2 (\$K)	Year 3 (\$K)	Year 4 (\$K)	Year 5 (\$K)	5-Year Total	%
Lead Institution (Name)	\$ amt						
Participating Institution (Name) (Repeat for each organization participating in the project.)							
Total							100%

- 5. **References Cited** Pages should be titled "References" at the top. While there is no established page limitation for the references, this section must include bibliographic citations only and must not be used to provide parenthetical information outside of the 25-page Project Description.
- Biographical Sketches Include a biographical sketch for each faculty level participant according to standard NSF guidelines. Include PhD and Post-doc advisors, and all PhD students supervised. Limit: 2 pages for each senior investigator.
- 7. Budget and Budget Narrative Prepare a separate budget page for each year plus a cumulative budget page. A budget justification must be included. Funding to be subcontracted to participating institutions must be listed under G.5, "subcontracts" and a detailed justification of these costs included in the budget justification. Travel must be reimbursed according to Louisiana travel regulations as stated in the Louisiana State Travel Policy and Procedures Manual 49 (PPM-49). Indirect Costs must be charged by each participating institution at the applicable indirect cost rate(s) negotiated with each institution's respective cognizant negotiating agency.
- 8. **Current and Pending Support** List Current and Pending Support for each faculty level investigator.
- 9. Facilities, Equipment, and Other Resources
- 10. Supplementary Documentation
 - a) List of Participants

Provide a list of participating senior investigators (faculty level and equivalent) by name, organizational and departmental affiliation.

- b) List of all institutions and companies involved in the project
- c) Budget Table B.

Budget Table B. In tabular form as follows, summarize the overall support levels (in \$K) planned for each of the major activities of the proposed RII Track-1 project. Provide separate entries for each research area including salaries and fringe benefits for participants, seed funding, and relevant equipment. Add appropriate entries if you propose more than two research areas. For all other entries include an estimated cost of the implementation of the proposed plans. Support for graduate students should normally be included under research, not under the workforce development plan or other sections.

BUDGET TABLE B.Support Levels for Major Activities

(To be completed by each participating institution)

Activity	Year 1 (\$K)	Year 2 (\$K)	Year 3 (\$K)	Year 4 (\$K)	Year 5 (\$K)	Total (\$K)	% of Total
Research Area 1 (Title) salaries and fringe benefits							
Research Area 1 Equipment							
Research Area 2 (Title) salaries and fringe benefits							
Research Area 2 Equipment							
Research Area 3 (as needed)							
Workforce Development							
Cyberinfrastructure							
Seed Funding							
Diversity Plan							
Partnerships and Collaborations							
Communications and Dissemination Plan							
Sustainability Plan							
Management (include all administrative expenses)							
Evaluation and Assesment							
Indirect Cost							
Other (specify)							
Total							100%

d) List of conflicts

e) Letters of Commitment

Include only official letters of commitment with specific commitments of resources from participating organizations or organizations anticipated to participate or provide resources to the project. Do not submit letters of support which do not provide specific commitments of resources.

f) Postdoctoral Researcher Mentoring Plan and a Data Management Plan

IV. QUESTIONS ABOUT THIS RFP

Specific questions concerning this RFP and the requirements set forth herein should be directed **in writing** to Mr. Jim Gershey, Executive Director of Special Programs, by email to jim.gershey@la.gov. Questions will be accepted and answered through **4:30 PM on Thursday, March 27, 2014** A running compilation of all questions asked about this RFP and all answers provided in response to those questions will be periodically posted on the BoR website at http://laregents.org.

NOTICE OF INTENT: NSF EPSCoR RII Track-1 Computational Materials (page 1 of 2)

NAME OF PRINCIPAL INVESTIGATOR:	NAME OF LEAD ORGANIZATION:
PI DEPARTMENT	PI PHONE NUMBER and EMAIL ADDRESS
TITLE OF PROPOSED PROJECT:	
☐ CHECKED BOX INDICATES THAT PI HAS DISCUSSED THIS PROPO	DSAL WITH LEAD INSTITUTION VPR/VCR:
LIST PARTICIPATING INSTITUTIONS/CAMPUSES:	
LIST PROJECT DISCIPLINES:	
PROJECT SYNOPSIS (maximum 250 words):	
NAMES of OTHER INVESTIGATORS*	INSTITUTION/DEPARTMENT
Co-PI*	
Co-PI*	
Co-PI*	

*Please note the restriction outlined in Section II.C of the RFP, which states that investigators at the PI and Co-PI level responding to this RFP may participate in only one proposal. Investigators may not be listed on multiple Notices of Intent. The number of Co-PIs allowed per proposal is limited to three (3).

NOTICE OF INTENT: NSF EPSCoR RII Information Technology (page 2 of 2)

Provide names, titles, mailing addresses, telephone numbers, and e-mail addresses for at least three out-of-state scholars in the specific field of your proposal who are qualified to evaluate your proposal and/or who can recommend other individuals who are qualified to evaluate your proposal. Great care should be taken to identify prospective reviewers who do not have conflicts of interest with the applicant, as might occur with former research collaborators, students, or major professors.

Reviewers cannot 1) have been a Louisiana faculty member during the previous five years; 2) have collaborated on a publication, funded project, or as a paid consultant with the applicant during the past five years; or 3) have supervised the master's thesis, doctoral candidacy, or post-doctoral work of the applicant.

In addition, although the Board cannot guarantee that certain reviewers will not be used, if the applicant believes certain individuals should <u>not</u> be asked to evaluate the proposal, their names, affiliations, and a brief explanation of the potential conflict must be provided. Attach additional pages as necessary to ensure that all required information is in legible form.

Name/Title (typed)	Mailing Address and Email Address	Telephone #

COVER SHEET FOR PROPOSAL TO THE BOARD OF REGENTS

FOR CONSIDERATION BY BOR ORGANIZATION UNITS(S) Sponsored Programs – EPSCoR							(FOR BOR USE ONLY) BOR PROPOSAL NUMBER			
PROGRAM ANNOUNCEMENT/SOLICITATION NO./CLOSING DATE Research Infrastructure Improvement - Track 1 RFP										
NAME OF LEAD ORGANIZATION:				ADDRESS C	ADDRESS OF LEAD ORGANIZATION, INCLUDING ZIP CODE:					
PI DEPARTMENT				PI POSTAL ADDRESS						
TITLE OF PROPOSED PROJECT:										
REQUESTED AMOUNT, YR 1: \$	REQUEST AMOUNT, \$		REQUEST AMOUNT, \$					TOTAL REQUESTED:		
LIST PARTICIPATING INSTITUTIONS/CAMPUSES:										
LIST PROJECT DISCIPLINES:										
NAMES (TYPED)		Highest Degre year attained	ee/ Tele	phone Number	Email Address					
PRINCIPAL INVESTIGATOR										
Co-PI*										
Co-PI*										
Co-PI*										

^{*}Please note the restriction outlined in Section II.C of the RFP, which states that investigators at the PI and Co-PI level responding to this RFP may participate in only one proposal. Investigators may not be listed on multiple Notices of Intent. The number of Co-PIs allowed per proposal is limited to three (3).

PROJECT SUMMARY

The Project Summary should include a statement of objectives, methods to be employed, and the significance of the proposed activity to the advancement of knowledge or education. Avoid use of first person to complete this summary. **DO NOT EXCEED ONE PAGE.**

BIOGRAPHICAL SKETCH

Provide the following information for all faculty level participants on the project. Begin with the PI, followed by the Co-PIs.

DO NOT EXCEED 2 PAGES PER PERSON.

Please follow the guidelines contained in Part I, Chapter II, Section C.2.f of NSF 13-1, the NSF Proposal and Award Policies and Procedures Guide (PAPPG), which can be accessed at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=papp.

BUDGET

LEAD PRINCIPAL INVESTIGATOR (PI):	ORGANIZ	Project Year:				
A. SENIOR PERSONNEL:PI/PD, Co-PI's, Faculty, & Senior Associates (List each separately with title, A.& show number in brackets(s))	NSF Funded person - months			Funds Requested	Institutional Matching (not required)	Total Project Costs
	CAL	ACAD	SUMR			
1.				0	0	0
2.				0	0	0
3.				0	0	0
				-		
4.				0	0	0
5. 6.() OTHERS (LIST INDIVIDUALLY ON				0	0	0
6.() OTHERS (LIST INDIVIDUALLY ON BUDGET EXPLANATION PG)				0	0	0
7 () TOTAL CENIOD DEDCONNEL (4.0)				0	0	0
7.() TOTAL SENIOR PERSONNEL (1-6) B. OTHER PERSONNEL (SHOW NUMBERS IN BRA	ACKETS)			U	U	0
1.() POST DOCTORAL ASSOCIATES	NORE 10)					
				0	0	0
2.() OTHER PROFESSIONALS				0	0	0
(TECHNICIAN, PROGRAMMER, ETC.) 3.() GRADUATE STUDENTS						
4.() UNDERGRADUATE STUDENTS				0	0	0
5.() SECRETARIAL-CLERICAL				0	0	0
5.() SECRETARIAL-CLERICAL				0	0	0
6.() OTHER				0	0	0
TOTAL SALARIES AND WAGES (A+B)				0	0	0
C. FRINGE BENEFITS (IF CHARGED AS DIR	ECT COST	ΓS)		0	0	0
TOTAL SALARIES, WAGES, AND FRINGE	BENEFITS	(A+B+C)		0	0	0
		<u> </u>		0	0	0
D. PERMANENT EQUIPMENT (LIST ITEM AN ITEM)	ND DOLLAF	RAMOUNTE	OR EACH			
TOTAL PERMANENT EQUIPMENT				0	0	0
E. TRAVEL 1. DOMESTIC (Incl. Canad	da & U.S. Pos	sesions)	0	0	0
2. FOREIGN				0	0	0
TOTAL TRAVEL				0	0	0
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS (Itemize levels, types + totals	on budget i	ustification pa	age)	0	0	0
2. TRAVEL	σ,	•	0 ,	0	0	0
3. SUBSISTENCE	`			0	0	0
 OTHER (fully explain on justification page) TOTAL PARTICIPANTS (1) TOTAL COS 				0	0	0
TOTAL PARTICIPANTS (1) TOTAL COS	Į			0	0	0
G. OTHER DIRECT COSTS				Ů,		
1. MATERIALS AND SUPPLIES	0	0	0			
2. PUBLICATION COSTS/DOCUMENTATIO	0	0	0			
3. CONSULTANT SERVICES	0	0	0			
4. COMPUTER (ADP) SERVICE	0	0	0			
5. SUBCONTRACTS	0	0	0			
6. OTHER	0	0	0			
TOTAL OTHER DIRECT COSTS	0	0	0			
H. TOTAL DIRECT COSTS (A THROUGH G)	0	0	0			
I. INDIRECT COSTS				0	0	0

CURRENT AND PENDING SUPPORT (From ALL sources, including the Board of Regents Support Fund)

The following information MUST be provided for each faculty level participant. Use additional sheets as necessary. For more detailed information on requirements for completing this form, please see Part I, Chapter II, Section C.2.h. of NSF-13, the NSF Proposal and Award Policies and Procedures Guide (PAPPG).

NAME OF INVESTIGATOR:

Project/Proposal Title:
Source of Support:
Award Amount (or Annual Rate): \$ Period Covered:
Location of Activity:
Person-Months or % of Effort Committed to the Project:Cal YrAcadSumm
Status of Support:CurrentPendingSubmission Planned in Near Future
Project/Proposal Title:
Source of Support:
Award Amount (or Annual Rate): \$ Period Covered:
Location of Activity:
Person-Months or % of Effort Committed to the Project:Cal YrAcadSumm
Status of Support:CurrentPendingSubmission Planned in Near Future
Project/Proposal Title:
Source of Support:
Award Amount (or Annual Rate): \$ Period Covered:
Location of Activity:
Person-Months or % of Effort Committed to the Project:Cal YrAcadSumm

FACILITIES, EQUIPMENT & OTHER RESOURCES

Identify the facilities to be used at each performance site listed and, as appropriate, indicate their capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Use "Other" to describe the facilities at any other performance sites listed and at sites for field studies. Use additional pages if necessary. For more detailed information on requirements for completing this form, please see Part I, Chapter II, Section C.2.i. of NSF-13, the NSF Proposal and Award Policies and Procedures Guide (PAPPG).

Laboratory:	
Clinical:	
Animal:	
Computer:	
Office:	
Other:	
other	
MAJOR EQUIPMENT: List the most important items available for this project and, as appropriate it	dentifying the
location and pertinent capabilities of each.	

OTHER RESOURCES: Provide any information describing the other resources available for the project. Identify support services such as consultant, secretarial, machine shop, and electronics shop, and the extent to which they will be available for the project. Include an explanation of any consortium/contractual arrangements with other organizations.