# Science and Technology Centers (STC): Integrative Partnerships Program

## Frequently Asked Questions (FAQs)

## 1. Changes in the STC Program and Solicitation

**Question:** How does the new FY 2003 STC Program Solicitation differ from the previous FY 2000 STC Program Solicitation (NSF 00-67)?

**Answer:** The new STC Program Solicitation has been revised in several ways: the solicitation format has been revised to be consistent with current NSF-wide standards for program announcements; changes have been incorporated to streamline the solicitation, to reduce workload for the research and education community, and to improve proposal content for reviewers. Highlights of the changes include:

- New requirements as specified in the revised NSF Grant Proposal Guide http://www.nsf.gov/pubsys/ods/getpub.cfm?gpg
- New due date for preliminary proposals: June 3, 2003
- Deadline for full proposals (by invitation only): February 10, 2004
- Expected start date for awarded STCs: June/July 2005;
- No letters of intent required (none should be submitted);
- Limit on number of site visits per lead institution;
- Letters of commitment without cost sharing (cash or in-kind) are not permitted and should not be submitted;
- Preliminary proposal budget requires 5-year summary only;
- Preliminary proposal review to focus on research and education proposed;
- Full proposal review to focus on integration of research and education, knowledge transfer, and management proposed;
- Site visit review on all aspects with special emphasis on management proposed;
- Revised language for preliminary and full proposal content:
  - Revised language to emphasize the 'integrative' and 'partnership' aspects of the Center;
  - o Revised language to clarify:
    - education goals and expectations;
    - additional management requirements and expectations;
    - knowledge transfer expectations;
  - Revised language to reflect current Cooperative Agreement language and expectations for STCs;

- Revised language defining the role and membership of the external Advisory Committee;
- Requires a statement on ethics and intellectual property rights, and development of a program and training for all staff (faculty and students), including development of appropriate courses across the partners, in the full proposal;
- Reduces the number of review criteria specific to STCs and further clarifies the intent of the review criteria;
- Requires a comprehensive list of Partner Institutions, Project Personnel, and Collaborators, to aid NSF in identifying potential conflicts of interest. There are no page limits for this information.

**Question:** What remains the same in the new STC Solicitation?

**Answer:** The objectives of the STC Program remain the same as in the previous solicitation. Most of the changes to this new solicitation are intended to clarify NSF's intent, and to streamline and improve the review process, based on experience with the previous competitions. Several main features include:

- Pending availability of funds, \$30 million to be available to make between 6-8 awards;
- Cost sharing required is 30% of the amount provided by NSF, no more, no less;
- Limits the number of preliminary proposals allowed by a lead institution to five;
- Requires submission of comprehensive lists of personnel, institutions, and collaborators involved for determining conflicts of interest;
- Provides deadline dates for preliminary proposals and full proposals;
- Preliminary and full proposals to be submitted via FastLane;
- Full proposals by invitation only.

## 2. Research areas appropriate for STCs

**Question:** What research areas are appropriate for STC preliminary proposals and full proposals?

**Answer:** NSF will entertain STC preliminary proposals and full proposals in all areas of research and education normally supported by the Foundation.

Question: What research areas are covered by the existing STCs?

**Answer:** This information and more about the existing STCs can be found at the following URL: <a href="http://www.nsf.gov/od/oia/programs/stc/ita.htm">http://www.nsf.gov/od/oia/programs/stc/ita.htm</a>

#### 3. Education Plan

**Question:** How involved should our Center be in education?

**Answer:** NSF expects each Center to make the education of American students a high priority and to apply the same scholarly mind-set to education as to research. A Center is expected to understand the challenges facing education in its areas of research, and the contributions that the Center has the potential to make to address those challenges. The contributions desired by the Center then drive the design of specific educational activities and their evaluation.

**Question:** Must each Center have K-12 activities? The past solicitation made mention of K-12, but we don't see it in this solicitation.

**Answer:** No, there is no requirement for K-12 activities. Each Center should undertake activities at the level of education that serve the Center research and education goals. These may involve any level from precollege through adult education.

#### 4. Eligibility

**Question:** May a not-for-profit 501(c)(3) submit a proposal to this program that contains at least one or two U.S. academic institutions with significant research and degree-granting education programs as well as national laboratories and state and local government laboratories?

**Answer:** No. The lead institution submitting an STC preliminary or full proposal must be a U.S. academic institution with significant research and degree-granting education programs in any area of science and engineering normally supported by NSF. A not-for-profit 501(c)(3) can be a partner with the lead institution that submits the STC preliminary or full proposal, but cannot be the lead institution itself.

## 5. Number of preliminary proposals

**Question:** Please clarify the statement within your Science and Technology Centers: Integrative Partnerships Program Solicitation that states: "A single institution may submit no more than five preliminary proposals as lead institution, and may be involved as a partner in additional preliminary proposals submitted by other institutions." How do the proposals on which we collaborate but are not the lead count against the five? The way this is written it appears we can have five as lead and an unlimited number on which we merely participate but not as lead.

**Answer:** You are correct in your interpretation of the language in the STC Program Solicitation. Your institution may submit as many as five preliminary proposals as lead and may, in addition, be a participant on an unlimited number of preliminary proposals that are submitted by lead institutions other than your own. The preliminary proposals on which you collaborate but do not lead are not counted against the five you submit as lead

institution.

#### 6. Cost sharing

Question: Could you please clarify the language regarding the cost sharing requirements?

Answer: The STC Program Solicitation states that "For eligibility purposes, cost sharing at a level of 30% of the requested total amount of NSF funds is required for all preliminary proposals and full proposals submitted in response to this solicitation." This means that cost sharing shown on submissions should be no less than 30% and no more than 30%. The 30% level required by NSF is an eligibility criterion rather than a review criterion. Thus, for the STC Program Solicitation, any proposal with cost sharing less than 30% or in excess of 30% will be ineligible and will be returned without review. This requirement assures that the level of cost sharing will be equivalent for all preliminary proposals and full proposals submitted to the STC competition.

In addition, "Cost sharing will be required at a level of 30% of the total amount provided by NSF for any STC funded by NSF". This indicates that once NSF reviews the proposal, if the budget amount NSF provides varies from the amount requested, the level of cost sharing required will remain at 30% of the amount that NSF ultimately provides.

**Question:** Is the entire 30% required to be from the lead institution or can it come from other sources?

**Answer:** The 30% can come from any number of non-Federal sources but the lead institution has to certify that the amount is available and the lead institution is ultimately responsible for the cost sharing should a partner institution default on it's cost sharing.

It is anticipated that most STCs will have cost sharing from a variety of sources or partners. Please note that, as defined in the STC Program Solicitation, "A partner is an institution or organization that invests intellectual resources in the Center, **backed by financial commitment to the Center.** The partner institutions work together with NSF to ensure vital participation in an integrative effort in the research education, and knowledge transfer activities of the Center."

**Question:** Is a level of 30% cost sharing required for each institution participating in the STC?

**Answer:** No. The lead institution of the proposed STC is responsible for the full cost sharing but may demonstrate cost sharing at a level of 30% with the participating institutions. Each partner may have different levels of cost sharing (each is to be provided on line M of the subawardees budget page). This allows a given Center to come up with the 30% cost share in any way it deems most appropriate. For example, an STC comprising

two institutions, each requesting the same amount of support from NSF, might have one cost share at a level of 40% and the other cost share at a level of 20%, for an overall cost sharing level of 30% for the Center as a whole. The key is that the overall Center cost share must be 30%, but NSF gives the Center the flexibility to determine how to arrive at this level when it decides upon the appropriate cost sharing for its participating members.

Question: Letters of commitment are not allowed. Can we submit a letter of commitment?

**Answer:** No. Letters of commitment are not permitted and may not be included with the preliminary or full proposal.

**Question:** Must cost sharing included in the preliminary proposal cover the ten-year period of support?

**Answer:** No. The preliminary proposal budget should include cost sharing for the first five years of the proposed Center only. The full proposal should also include cost sharing for the first five-year period of support. The second five-year period of cost sharing will not be required until a renewal proposal is submitted.

### 7. Budgets for Preliminary Proposal and Full Proposal

**Question:** The solicitation requests a budget for the five-year period only. Should we submit a budget for each year in the preliminary proposal?

**Answer:** No. You should only provide a total budget for the full five-year period. In FastLane, enter the total 5-year budget in "Budget year 1". A detailed budget for each year and budgets for subawardees/subcontractors should not be submitted in the preliminary proposal. However, you should briefly describe in your budget justification how funds will be allocated for each year to the research, education, and knowledge transfer areas, for each participant, and indicate your plans for the start-up phase of the Center. You should also indicate large, costly items, such as major equipment, that will be needed.

**Question:** Should we submit a budget for each subawardee or participating institution in the preliminary proposal or the full proposal?

**Answer:** Not in the preliminary proposal. NSF needs only the total budget for the preliminary proposal. For the full proposal, a budget for each subwardee is needed. The lead institution budget should show total amounts; the sum of all the subawardee budgets should add up to the amount shown on the lead institution budget page for subawardees.

## 8. STC Directors—citizenship and eligibility:

**Question:** Are permanent residents eligible to be prospective STC directors, or are only U.S. citizens to be considered?

**Answer:** As long as the investigator is engaged in science and technology research and education at a U.S. institution, he or she is eligible. For the STC Program, permanent residents are eligible to be prospective STC directors and applicants are not limited to U.S. citizens.

#### 9. Notice of intent

**Question:** Does NSF require letters of intent for this competition as it did in the last competition?

**Answer:** No. Letters of intent are not required, and should not be submitted.

## 10. Lists of Institutions and Project Personnel—page limit

**Question:** In the last solicitation, there were page limits set for the lists of project personnel and institutions. Are there page limits for this new solicitation?

**Answer:** No. In short, accuracy is much more important to us than the page limit—both for the list of participants and list of collaborators/conflicts. Please use as many pages as needed for full and accurate lists. However, the lists should include no material other than that asked for in the Program Solicitation. The font size should be the same throughout the proposal. Please be advised that page limits as indicated for other sections of the proposal will be strictly enforced.

## 11. Lists of Institutions, Project Personnel, and Collaborators—Conflicts of Interest

**Question:** The STC Program Solicitation asks for lists of institutions, project personnel, and collaborators with Conflicts of Interest. What constitutes a Conflict of Interest?

**Answer:** In addition to lists of institutions and project personnel, the STC Program Solicitation requires that Principal Investigators provide, to the best of their ability, a list of all collaborators, participants and affiliates, to aid NSF in identifying reviewers who may have potential conflicts of interest with any of the project's personnel (PI, co-PI, and other personnel).

To assist you in knowing what constitutes a Conflict of Interest, be advised that when your preliminary proposal or full proposal is reviewed by the National Science Foundation, reviewers will be asked to disclose as potential conflicts of interest any of their affiliations and relationships in the areas listed below.

We realize that a PI cannot be expected to know all the details of conflicts of interest for the entire potential reviewing community. Therefore, for purposes of the STC collaborators list, please concentrate your efforts on providing us with information for those collaborators whose Conflicts of Interest can be found under the first major grouping below, namely, "Personal Relationship with an Investigator, Project Director, or Other Person Who Has a Personal Interest in the Proposal or Other Application."

# • PERSONAL RELATIONSHIP WITH AN INVESTIGATOR, PROJECT DIRECTOR, OR OTHER PERSON WHO HAS A PERSONAL INTEREST IN THE PROPOSAL OR OTHER APPLICATION

- o Known family relationship as spouse, child, sibling, or parent.
- o Business or professional partnership.
- o Past or present association as thesis advisor or thesis student.
- Collaboration on a project or on a book, article, report, or paper within the last 48 months.
- o Co-editing or a journal, compendium, or conference proceeding within the last 24 months.

## PERSONAL AFFILIATIONS WITH THE APPLICANT AND PARTNER INSTITUTIONS

A person may have a conflict if they have/hold/are:

- Current employment at the institution as a professor, adjunct professor, visiting professor, or similar position. (NOTE: Please do not list as Conflicts of Interest the faculty at your institution and partner institutions as you are already providing this information in the required lists of personnel and institutions.)
- Other current employment with the institution (such as consulting or an advisory arrangement).
- o Previous employment with the institution within the last 12 months.
- o Being considered for employment with the institution.
- o Formal or informal reemployment arrangement with the institution.
- Ownership of securities of firms involved in the proposal or application.
- o Current membership on a visiting committee or similar
- body at the institution. (This is a conflict only for proposals or applications that originate from the department, school, or facility that the visiting committee or similar body advises.)
- Any office, governing board membership or relevant committee chairpersonship in the institution. (Ordinary membership in a professional society or association is not considered an office.)
- Current enrollment as a student. (Only a conflict for proposals or applications that originate from the department or school in which one is a student.)
- Received and retained an honorarium or award from the institution within the last 12 months.

#### • PERSONAL OTHER AFFILIATIONS OR RELATIONSHIPS

- o Interests of the following persons are to be treated as if they were yours: Any affiliation or relationship of your spouse, of your minor child, of a relative leaving in your immediate household or of anyone who is legally your partner that you are aware of, that would be covered by any items above.
- Other relationships, such as close personal friendship, that you think might tend to affect your judgement or be seen as doing so by a reasonable person familiar with the relationship.

**Question:** After we submit the preliminary or full proposal, are we to update this information in FastLane?

**Answer:** No. Once the preliminary (or full) proposal is submitted, any changes in the participating institutions, personnel, collaborators, subcontractors, or other affiliates can't be made to the proposal (preliminary or full). However, it is important to notify NSF of changes as they occur, for the purpose of identifying potential conflicts of interest during the review process.

**Question:** Should we notify NSF of changes in personnel or participating institutions? When should we notify NSF?

**Answer:** Yes. Updated information should be sent by the lead institution to <u>stc@nsf.gov</u> as soon as it is available. Updated completed information will be requested prior to a site visit.

## 12. Required Supplementary Documents information for Single Copy Documents.

**Question:** The preliminary proposal requires a list of Partner Institutions and a List of Project Personnel to be submitted as part of the Supplementary Documents required. Is this the same information that is required for the Single Copy documents? Why do we enter this in two places?

**Answer:** Yes. The lists of Partner Institutions and Project Personnel are required as supplementary documents for both preliminary and full proposals. Supplementary Documents in FastLane are PDF files, and can't be used to create the database needed by staff, therefore the information must be entered into the two different locations in FastLane.

This information is needed as part of the proposal for reviewers and NSF staff. Entering this information in the Supplementary Documents section ensures it will be accessible to reviewers as part of the proposal. It is recommended that you enter the Non Co-PI Senior Personnel information in the Single Copy Document section "List of Personnel, Collaborators and Affiliates" first, and then enter information in the Supplementary Documents section.

Single Copy Documents do not become part of the proposal and are not seen by reviewers. The information you provide, as a Single Copy Document becomes part of a database used by NSF staff.

The "List of Collaborators/Individuals with Conflicts of Interest", must be entered as a Single Copy Document and is critical for the NSF review of your proposal. It is important that the information for these lists is complete and accurate, and in the correct format. Follow instructions provided in FastLane and the solicitation.

**Question:** Is the information for the Supplementary Documents and the Single Copy Documents optional?

**Answer:** No. Complete and accurate information is required for both the preliminary and full proposals submitted to this competition.

#### 13. Federal Government laboratory partnerships

**Question:** I am interested in preparing a preliminary proposal for the new STC Program Solicitation. The Program Solicitation mentions collaborations and partnerships with National Laboratories. Can you tell me what limitations apply to these collaborations regarding funding resources? In particular, is it possible to provide money directly to lab personnel for salary, travel, and hiring of students and post-docs?

**Answer:** The STC Program encourages partnerships with Federal Government laboratories, including the National Laboratories operated by the Department of Energy. However, NSF does not typically reimburse costs that are covered by another agency's appropriations. NSF funding of federal employees such as lab personnel is generally not appropriate (see NSF Grant Policy Manual 616.3).

## 14. International collaboration

**Question:** How does NSF view international collaboration?

**Answer:** Centers are encouraged to engage in cooperative activities with foreign scientists and organizations whenever it will benefit science or engineering and not harm United States competitiveness. Before a Center engages in any cooperative international activities, the Center Director must notify the cognizant NSF Program Officer for review and approval. Each Center must include information about its international activities in it's annual report; and must use its best efforts to ensure that any collaboration between the Center and a foreign individual or organization will be conducted on a comparable access basis.

**Question:** As we are developing our preliminary proposal for an STC, we had a question concerning international participation. We would like to know if it is acceptable to include international industries as well as academics in the STCs.

**Answer:** There is no problem with either academic or industrial international collaboration as long as it can be justified as an integral part of the proposed Center's activities. Many of the currently supported STCs include both types of international collaboration. However, the foreign partners, not NSF, must provide funding for international academic or industrial collaborators.

**Question:** Can a foreign institution, as a partner or subcontractor, be financed with funds from an STC award?

**Answer:** NSF does not expect to fund foreign institutions as partners or subcontractors. Extraordinary circumstances may be considered on a case-by-case basis, such as activities that require access to unique foreign facilities, unique foreign data resources not generally available to U.S. investigators (or which would require significant effort or time to duplicate), foreign geographic locations, or other foreign resources that are essential contributing factors to the success of the proposed project.

**Question:** Graduate students working on our proposed STC will be supported as research assistants. I assume that these positions would be open to any qualified student, foreign or U.S. that we admit to our graduate programs, as is the case with an NSF grant. If there are restrictions on appointing research assistants we would like to be made aware of them.

**Answer:** One of the goals of the STC Program is to increase the numbers of educated U.S. citizens by increasing the numbers of U.S. undergraduate students, graduate students and post-docs engaged in science and engineering. The STC Program Solicitation does not specifically rule out research assistantships to foreign students. However, if a proposed Center is to meet the goals of the STC program for educating U.S. citizens, then the proposed Center should plan for U.S. citizens (undergraduates and graduates) to be the principal, if not exclusive, recipients of educational aid and research assistant appointments. It would be difficult to see how a proposed Center's educational component could be acceptable if it did not include a large preponderance of U.S. citizens as beneficiaries.

**Question:** Our proposed Center does not include a "fellowship program" as such. However, we would like to propose paying for "three-month living stipends" for students from collaborating institutions in foreign countries to visit members of the Center for cooperative research and training. If there are any restrictions on this, please advise.

**Answer:** In general, the country sending the students is expected to pay for their travel to and expenses in the receiving country. There are exceptions for students from countries

whose currency is not convertible. The STC Program rarely supports activities to bring foreign students to the U.S. since one of the goals of the Program is to educate U.S. citizens as students and post-docs engaged in science. Extraordinary cases may be considered on a case-by-case basis.

**Question:** Is it acceptable for a foreign laboratory to allocate and pay for a foreign post-graduate fellowship for our proposed STC?

**Answer:** There is no problem with a foreign laboratory's paying for foreign post-graduate fellowships at an STC.

## 15. Next STC competition:

**Question:** After the current STC competition is completed, when will the next STC competition begin?

**Answer:** Pending availability of funds, the next STC competition is expected to start three years from the start of this competition. The Program Solicitation for the current competition is expected serve as the Program Solicitation for the next competition, subject to change. The deadline dates and review schedule for the next competition, although not yet determined, should be similar to those for the currently announced competition. The STC web site will be updated with information regarding the next competition when deadline dates for preliminary proposals and full proposals are better known.