



**National Science Foundation
4201 Wilson Boulevard
Arlington, Virginia 22230**

FAQs for Science and Technology Centers (STC): Integrative Partnerships Program

Changes in the STC Program and Solicitation

- [How does the new FY 2008 STC Program Solicitation differ from the previous FY 2003 STC Program Solicitation \(NSF 03-550\)?](#)
- [What remains the same in the new STC Solicitation?](#)

Research areas appropriate for STCs

- [What research areas are appropriate for STC preliminary proposals and full proposals?](#)
- [What research areas are covered by the existing STCs?](#)

Education Plan

- [How involved should our Center be in education?](#)
- [Must each Center have K-12 activities? The past solicitation made mention of K-12, but we don't see it in this solicitation.](#)
- [How much detail should be provided if the educational focus is on undergraduate students, K-12 or other outreach activities?](#)
- [Can you provide us with additional guidance on the education and diversity efforts?](#)

Eligibility

- [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?](#)

Number of preliminary proposals

- [Please clarify the statement within your Science and Technology Centers: Integrative Partnerships Program Solicitation that states:](#)

Cost sharing

- [Could you please clarify the language regarding the cost sharing requirements?](#)

Budgets for Preliminary Proposal and Full Proposal

- [The solicitation requests a budget for the five-year period only. Should we submit a budget for each year in the preliminary proposal?](#)
- [Should we submit a budget for each subawardee or participating institution in the preliminary proposal or the full proposal?](#)
- [We anticipate that we will need air or ship time. Should these costs be included in our STC budget request?](#)

STC Directors—citizenship and eligibility

- [Are permanent residents eligible to be prospective STC directors?](#)

Notice of intent

- [Does NSF require letters of intent for this competition as it did in earlier competitions?](#)

Lists of Institutions and Project Personnel—page limit

- [In earlier solicitations, there were page limits set for the lists of project personnel and institutions. Are there page limits for this new solicitation?](#)

Lists of Institutions, Project Personnel, and Collaborators—Conflicts of Interest

- [The STC Program Solicitation asks for lists of institutions, project personnel, and collaborators with Conflicts of Interest. What constitutes a Conflict of Interest?](#)
- [After we submit the preliminary or full proposal, are we to update this information in FastLane?](#)
- [Should we notify NSF of changes in personnel or participating institutions? When should we notify NSF?](#)

Federal Government laboratory partnerships

- [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?](#)

International collaboration

- [How does NSF view international collaboration?](#)
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- [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.](#)
- [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.](#)
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Next STC competition

- [After the current STC competition is completed, when will the next STC competition begin?](#)

1. Changes in the STC Program and Solicitation

How does the new FY 2008 STC Program Solicitation differ from the previous FY 2003 STC Program Solicitation ([NSF 03-550](#))?

The new STC Program Solicitation has been revised in several ways, including the elimination of cost sharing, a reduction in the number of preliminary proposals per lead institution, and an

increase in the annual NSF award budget. Highlights of the changes include:

- Cost sharing no longer required for preliminary or full proposals;
- Maximum annual NSF budget increased to \$5,000,000;
- New requirements regarding allowed fonts and font sizes as specified in the revised NSF Grant Proposal Guide <http://www.nsf.gov/pubsys/ods/getpub.cfm?gpg>;
- New due date for preliminary proposals: September 30, 2008;
- Deadline for full proposals (by invitation only): April 30, 2009;
- Expected start date for awarded STCs: June 2010;
- Limits the number of preliminary proposals allowed by a lead institution to three;
- Current and pending support statements required for PI and co-PIs;
- Centers with *funded* partner institutions must use subaward rather than collaborative proposal mechanism;
- Strengthened language for preliminary and full proposal content:
 - Transformative Research
 - Cyberinfrastructure
 - Global context
 - Assessment
 - Broadening participation
 - U.S. student participation.

What remains the same in the new STC Solicitation?

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, \$25 million to be available to make between 5-7 awards;
- 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 proposals to be submitted via FastLane;
- Full proposals to be submitted via FastLane or Grants.gov;
- Full proposals by invitation only.

2. Research areas appropriate for STCs

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

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

What research areas are covered by the existing STCs?

This information and more about the existing STCs can be found at the following URL: <http://www.nsf.gov/od/oia/programs/stc/>

3. Education Plan

How involved should our Center be in education?

NSF expects each Center to make the education of students who are U.S. citizens, nationals and permanent residents 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.

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

No, there is no requirement for K-12 activities. Each Center should undertake activities at the level of education that serves the Center research and education goals.

How much detail should be provided if the educational focus is on undergraduate students, K-12 or other outreach activities?

In all cases, proposals should contain enough detail such that reviewers can evaluate the importance of the effort and the likelihood of success. For example, proposals that include a focus on undergraduate education activities should reflect current understanding of how students learn in STEM fields and engaging pedagogy. For those proposing K-12 activities, briefly describe how this effort builds upon existing robust K-12 activities with K-12 organizations or plans to form collaborations with large scale projects such as NSF Math and Science Partnership projects. In addition, briefly outline plans (if any) for public engagement and outreach through partnerships with organizations experienced in informal learning and serving public audiences.

Can you provide us with additional guidance on the education and diversity efforts?

Here are some points to consider as you prepare your plans for your education and diversity efforts:

- Clearly define the goals of the Center's education and diversity efforts and translate these into outcomes you would expect to see if you achieved these goals. Think of the goals as your intentions or ambitions and the expected outcomes as the observation you would see if you achieved your ambitions or intentions.
- Describe the evaluation plan that the Center will use in monitoring progress toward the expected education and diversity outcomes. This plan should identify the evaluators, provide some details on the protocols and indicate how the education and diversity plans will be adapted and how the results will be shared through the literature on successful practices.
- Focus the Center's education and diversity efforts on a few activities that are substantial with high potential impact. A concentrated in-depth effort is more likely to have an impact than a large number of superficial unrelated efforts.
- If possible, build the Center's education and diversity efforts on existing, successful efforts. The Center's involvement should significantly expand these efforts and the value added by the Center's involvement should be clear.
- For education and diversity activities that represent new initiatives, indicate all collaborations or connections that will enable these activities and provide a basis for estimating the likelihood of success.
- Describe the research or existing practices that provides the rationale for the planned education and diversity activities. This discussion should demonstrate an understanding of the issues involved in these activities and support the choices the Center has made.
- Show how the planned education and diversity activities are related to the Center's research and technology development emphases.
- Indicate who will participate in each education and diversity activity and ensure that all participating institutions are involved substantially in some of these activities and that none of the activities are relegated to a single institution.

- Describe how the Center's activities will broaden participation of underrepresented groups, e.g., underrepresented racial or ethnic minorities, women, and people with disabilities, at all participating institutions.

4. Eligibility

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?

No. The lead institution submitting an STC preliminary or full proposal must be a U.S. academic institution with 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

Please clarify the statement within your Science and Technology Centers: Integrative Partnerships Program Solicitation that states:

"A single organization may submit a maximum of three preliminary proposals as the lead institution. A single organization may also request funding via a subaward as a *funded* partner organization. In no case may an organization request funds as a lead or funded partner organization on more than five preliminary proposals. Note that this limit only applies if an organization is requesting NSF support, i.e., there is no limit on the number of proposals in which an organization may participate as an *unfunded* partner." Your institution may submit a maximum of three preliminary proposals as lead. In addition, your institution may be listed as a subawardee in proposals submitted by other institutions. The sum of the number of proposals that your institution submits as lead plus the number of proposals in which your institution appears as a subawardee may not exceed five. Your institution may participate as an **unfunded** partner on an unlimited number of preliminary proposals that are submitted by lead institutions other than your own.

6. Cost sharing

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

Cost sharing is no longer required. Voluntary cost sharing, if provided, will **NOT** influence the funding recommendation.

7. Budgets for Preliminary Proposal and Full Proposal

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

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.

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

Not in the preliminary proposal. NSF needs only the total budget for the preliminary proposal. For the full proposal, a budget for each subawardee 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.

We anticipate that we will need air or ship time. Should these costs be included in our STC budget request?

Yes

8. STC Directors—citizenship and eligibility

Are permanent residents eligible to be prospective STC directors?

Yes

9. Notice of intent

Does NSF require letters of intent for this competition as it did in earlier competitions?

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

10. Lists of Institutions and Project Personnel—page limit

In earlier solicitations, there were page limits set for the lists of project personnel and institutions. Are there page limits for this new solicitation?

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

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

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**

- Known family relationship as spouse, child, sibling, or parent.
- Business or professional partnership.
- 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.
- Co-editing of 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).
- Previous employment with the institution within the last 12 months.
- Being considered for employment with the institution.
- Formal or informal reemployment arrangement with the institution.
- Ownership of securities of firms involved in the proposal or application.
- 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**
 - 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 living 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.

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

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.

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

Yes. Updated information should be sent by the lead institution to stc@nsf.gov 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.

The preliminary proposal requires a list of Partner Institutions and a List of Project Personnel to be submitted as part of the Supplementary Documents. Is this the same information that is required to be submitted to NSF via email? Why do we enter this in two places?

Yes, it is the same information that is to be submitted to NSF via email. 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 submitted to NSF in spreadsheet format, as well (see [NSF 08-580](#), the STC solicitation).

Is the information for the Supplementary Documents and the Single Copy Documents optional?

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

13. Federal Government laboratory partnerships

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?

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

How does NSF view international collaboration?

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 its 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.

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.

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.

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

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.

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.

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.

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.

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.

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

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

15. Next STC competition

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

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 to 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.