Guidelines for the Class of 2005 Science and Technology Centers (Centers or STCs)

PROGRAM SOLICITATION


FUNDING, PERFORMANCE, AND REVIEW

Following is the anticipated schedule and type of review/evaluation:

<table>
<thead>
<tr>
<th>Performance Year</th>
<th>Fiscal Year</th>
<th>Performance Period</th>
<th>Type of Review/Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>2005</td>
<td>June 1, 2005 to May 31, 2006</td>
<td>Retreat &amp; Site Visit</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>2006</td>
<td>June 1, 2006 to May 31, 2007</td>
<td>Site Visit</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
<td>2007</td>
<td>June 1, 2007 to May 31, 2008</td>
<td>Site Visit</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>2008</td>
<td>June 1, 2008 to May 31, 2009</td>
<td>Critical Site Visit</td>
</tr>
<tr>
<td>5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>2009</td>
<td>June 1, 2009 to May 31, 2010</td>
<td>Site Visit</td>
</tr>
</tbody>
</table>

The NSF STC Management Team, led by the Lead Program Official, will negotiate the date for each site visit with the principal investigator of the Center. Each site visit is to take place at least three to four weeks prior to the end of each performance period in order for funding decisions to be made and the processing of NSF paperwork to take place. The Site Visit Team will consist of external experts in the scientific and/or engineering areas that are the foci of the Center, as well as knowledge transfer, diversity, and education. The Site Visit Team will write and submit to NSF and the principal investigator a report on the Center. The site visit evaluation (Critical Site Visit) held in the fourth year of the award will consist of <i>ad hoc</i> mail reviews of the Center and a formal, on-site review with external experts who will produce a written report and submit it to NSF and the principal investigator. This review will determine whether the Center will receive funding in years six through ten or whether it will phase out in year five.

The awardee will meet, as necessary, with NSF staff to review operations of the Center and to exchange views, ideas, and information concerning the Center.

Also, NSF may request Special Reports from the awardee. The awardee is required to submit those reports following instructions provided at the time by NSF.

No Center will be funded with STC funding for more than ten years.

Continuation of NSF support will depend upon an annual evaluation of progress, accomplishments, and availability of funds. Annual evaluations will include site visits with external reviewers who will produce a written report. All facets of the STC will be evaluated. Examination of an STC’s adherence to its diversity plan, and making the STC and its subawardees accountable for results, will be a prominent part of the annual site visits. The annual progress report will provide much of the information required for the annual evaluation. NSF will have a consultant interact with the appropriate STC personnel to obtain the additional information if needed. NSF will give appropriate notice to the STC in case of any change in the time or type of review. In addition, the Awardee will meet, as necessary, with NSF staff to review
operations of the Center and to exchange views, ideas, and information concerning the Center. Additional
details follow.

1. Funding: It is the intent of NSF to provide a total up to $19,000,000 to support the Center for up
to five years commencing June 1, 2005. Funds in the amount of $3,000,000 are to be provided to
support the Center for the period June 1, 2005 to May 31, 2006, in accordance with the revised
budget of the Center. For the remaining four years, continued NSF support will be provided
annually with the second increment to be awarded in FY 2006, depending upon the availability of
funds.

2. Funding Schedule: The level of continued NSF support will be negotiated with the Awardee
annually. Continuation of NSF support will depend upon an annual evaluation of scientific
progress, accomplishments, and the availability of funds. The annual progress report, submitted
by the Center, will provide much of the information required for this evaluation. Annual
evaluations will include site visits with external reviewers who will produce a written report. A
summary of the site visit schedule for each year is provided in the preceding section. In the event
that the anticipated level of NSF support cannot be awarded because of budgetary constraints,
NSF and the Awardee will negotiate a change in the scope of Center activities.

3. Review of Renewal Proposal: The Center must submit a renewal proposal by September 1, 2008,
in the fourth year of current support, for consideration of continued NSF support for the five-year
period beginning June 1, 2010. After receipt of the renewal proposal, NSF will conduct an in-
depth review of the Center to determine whether NSF will continue to support full Center
operations for another five-year period or will provide decreased funding to phase out NSF
support of the Center over the remaining one year (June 1, 2009 to May 31, 2010) of this
Cooperative Agreement. This review will consist of ad hoc mail review and a formal, on-site
review with external reviewers who will produce a written report. NSF will endeavor to provide
notification of the decision for renewed support no later than May 1, 2009, but a delay in
notification is not to be interpreted that an award will or will not be made.

If, as a result of the fourth-year review, NSF renews support for the Center, the five-year
Cooperative Agreement will be amended to include an additional five years of support, at levels
to be negotiated at that time, commencing at the beginning of the sixth year, effective June 1,
2010. The amendment to the Cooperative Agreement will include a specifically planned two-
year phase-out period for NSF support of the Center during its final two years of operation. The
Center will continue to be monitored at least every 18 months during its second five-year period
of support. NSF will support the Center for a maximum of ten years.

If, as a result of the fourth-year review, continued Center operation is not recommended, NSF
will provide a decreased level of funding (at 75% of the levels for the fourth year) to phase out
NSF support over the remaining one year of the Cooperative Agreement.

The decision to renew or phase out funding will be based on the following merit review criteria
from the Science and Technology Centers (STC): Integrative Partnerships Program Solicitation
(NSF 03-550):

a. the progress made by the Center in accomplishing the goals articulated in its Strategic and
   Implementation Plan and other relevant documents as measured by the performance and
   management indicators;
b. intellectual merit and importance of the Center’s activities in advancing knowledge and understanding within its own field or across different fields; research accomplishments and performance of the Center team; creativity and originality in exploring concepts;

c. broader impacts of the Center’s activities in advancing discovery and understanding while promoting teaching, training, and learning; the Center’s record of broadening the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.); the Center’s enhancement of the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships; broad dissemination of results to enhance scientific and technological understanding; benefits of the proposed activity to society;

d. value added by the Center in stimulating interdisciplinary or multidisciplinary interaction and/or collaboration across a novel research area; relationship to existing and planned institutional programs and capabilities in research and education; institutional, national, and international impact in research and education;

e. integrating research and education, including effective educational programs that broaden the career paths of involved students; fostering a climate of interaction and effective knowledge transfer both among diverse university departments and between the university and its partners in academia, industry, and/or other sectors;

f. developing human resources, including increased participation by U.S. citizens, particularly women and underrepresented minorities and persons with disabilities in research and education; formation of substantive and long-term partnerships and collaborations with minority-serving institutions and/or women’s colleges;

g. partnerships and knowledge transfer including the development of trusted partnerships and active collaboration with industry, public, and/or international sectors; stimulation and facilitation of knowledge transfer and strengthening the linkages between university-based research and its application and implementation;

h. shared experimental facilities (when appropriate), including the development, establishment, operation, and maintenance of new instrumentation or shared experimental facilities (including databases); provision of appropriate access to users from the home institution, other academic institutions, and other sectors;

i. leadership, management plan, institutional support, and budget, including the vision, experience, and capacity of the Center Director and the Center leadership team in managing a complex, multi-faceted, and innovative research, education, and knowledge-transfer enterprise; effectiveness of the management plan, including the mechanisms for topic selection, resource allocation, evaluation of progress, and project termination; documentation of institutional and other commitments to the Center; appropriateness of the budget.

Accordingly, the Center Director will develop and maintain a system of management and performance indicators to be used in determining the overall effectiveness of the Center, based on the above criteria.

4. Nothing in these terms supersedes NSF’s rights under Article 41, “Suspension or Termination for Convenience,” of the Cooperative Agreement General Conditions, CA-1 (7/02), which is on the webpage at http://www NSF.gov/pubs/ge1/ca102.pdf.
5. Costing Sharing: In addition to the conditions of GC-1, Article 22 found at http://www.nsf.gov/pubs/2002/gc102/ge102.pdf, the following applies:

As a condition of this award, the Awardee agrees to provide cost sharing as specified in its proposal or subsequent approved revised version of the proposal.

While it is understood that the cooperating partners will contribute significantly to this cost sharing, Awardee is responsible for satisfying the cost-sharing obligation. Recognizing that some amounts are directly related to faculty recruitment by the awardee and the subawardees, such cost sharing obligations will be considered fulfilled if undertaken during any of the 5 years of the award.

No Federal funds may be used to meet the Awardee’s cost sharing obligation for the Center. Acceptable forms of cost sharing contributions are those that meet the criteria established in Section 23 of OMB Circular A-110 (http://www.whitehouse.gov/omb/circulars/a110/a110.html#23).

REPORTING REQUIREMENTS

For reporting requirements, see http://www.nsf.gov/od/oia/programs/stc/documents.jsp.

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 3145-0194. Public reporting burden for this collection of information is estimated to average 100 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, Division of Administrative Services, National Science Foundation, Arlington, VA 22230.