**SCIENCE & TECHNOLOGY CENTER (STC) INTEGRATIVE PARTNERSHIPS (**[**NSF 19-567**](https://www.nsf.gov/pubs/2019/nsf19567/nsf19567.htm)**)**

**Required Components of Preliminary Proposals**

**1.** **Cover Sheet.** List start date as 06/01/21. List Center Director as PI.

**2.** **Project Summary.** (1 pg max; limit 4600 characters including spaces). 3 sections:

* **Overview**. Briefly summarize the goals and activities of the project. At the end of this section, list up to 3 NSF divisions relevant for the Center (in order of priority with most relevant listed first) and up to 3 keywords for your research topics (in order of priority).
* **Intellectual Merit**. Explain how the project will advance or transform knowledge/ understanding within and beyond the scientific field of inquiry.
* **Broader Impacts.** Explain how the project will benefit society and/or contribute to advancing desired social outcomes.

**3.** **Table of Contents**. Automatically generated by FastLane.

**4.** **Project Description.** (12 pg max)

*Do not include Results from Prior NSF Support. do not include links to URLs.*

**4a. Center Rationale**

* Articulate your vision for the Center.
* Clearly outline the grand challenge(s) being addressed, the breakthroughs being sought, the potential impacts, and intended legacies of the Center.
* Explain the unique opportunities that an integrated STC will provide and describe what will be achieved in the center mode that could not be achieved with other NSF funding mechanisms including other NSF center programs.
* Address the timeliness of the proposed Center (why this is the right time for the Center and why this is an important area for a research investment at this time).

**4b. Center Plan**

* Provide an overview of your research plan in the context of national and global landscapes of relevant scientific fields, with sufficient detail to allow the assessment of the scientific merit and to justify the necessity for the center mode of operation.
* Delineate the anticipated major accomplishments over the first five years of the Center’s existence.
* Include a description of what you perceive will be the major challenges and bottlenecks in achieving these accomplishments and explain why.

**4c. Team Description**

* Describe the role and assets each participating organization brings to the Center.
* Briefly describe the role each team member will have in addressing the Center’s goals.
* Highlight the unique assets and strengths of the proposing team compared to other groups working in related areas.

**4d. Integration Strategies**

* Describe how the proposed research areas/themes integrate with each other to realize the Center's research vision.
* Describe the focus of the education, broadening participation, and knowledge transfer activities.
* Outline how the integration of research, education, and knowledge transfer, in a center-level activity, will advance the proposed research.
* Identify specific activities and mechanisms that will enable cross-organizational and cross-sector integration of the team.
* Address the specific roles and responsibilities of the PI, co-PIs, and other Senior Personnel in leading the Center and developing a center culture.

**5.** **References Cited.** (2 pg max). List all authors for each work cited. See NSF PAPPG for format.

**6.** **Biosketches.** (2 pg each). Required for the Center Director and all faculty and staff whose research, education, knowledge transfer, or broadening participation activities will be supported by the Center. See PAPPG for details.

**7.** **Supplementary Documents.** A list of partner organizations and project personnel as described below is required. This information provides NSF and reviewers with a comprehensive list of personnel and organizations involved in the STC.

**7a. Project Personnel.**  List all project personnel who have a role in the Center’s management, research, education, broadening participation, and knowledge transfer components. Use the following format: last name, first name, institution/organization.

**7b. Institutional and Organizational Affiliations.** List all institutions/organizations with which project personnel are affiliated. Designate for each an appropriate category from the following: Institution of Higher Education; National Laboratory; Federal Government; Industry; Non-Governmental Organizations; State/Local Government; or International Organization.

**8. Single Copy Documents**

**Required**

* Collaborators & Other Affiliations (COA): Information regarding collaborators and other affiliations must be separately provided for each individual identified in list 7(a) above. The accuracy of the COA document is very important to the integrity of the STC review process. Please be accurate and complete with the entries.

COA information must be uploaded using the NSF [COA template](https://www.nsf.gov/bfa/dias/policy/coa/coa_template.xlsx) into the Single Copy Documents section as described in the PAPPG and on the [Collaborators and Other Affiliations Information](https://nsf.gov/bfa/dias/policy/coa.jsp) website (<https://nsf.gov/bfa/dias/policy/coa.jsp>).

**Optional**

* List of suggested reviewers or reviewers not to include (with a brief explanation or justification).
* Proprietary or privileged information (if applicable).

*DO NOT INCLUDE Current and Pending Support.*

*DO NOT INCLUDE Facilities, Equipment, and Other Resources.*

No other items or appendices are to be included.

Preliminary proposals containing items other than those required will be returned without review.

Proposers are advised to consult the Program Description in [NSF solicitation 19-567](https://www.nsf.gov/pubs/2019/nsf19567/nsf19567.htm) for additional general information on the STC program, the [STC Integrative Partnerships website](https://www.nsf.gov/od/oia/programs/stc/index.jsp) for updated information/FAQs, and NSF’s current [Proposal & Award Policies & Procedures Guide](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg) for more information on the agency’s policies and required formats.

**REVIEW CRITERIA FOR PRELIMINARY PROPOSALS**

**Standard NSF Merit Review Criteria**

1. What is the potential for the proposed activity to:

(a) **advance** and/or **transform knowledge and understanding** within its own field or across different fields? (Intellectual Merit)

(b) **benefit society** and/or **advance desired societal outcomes**?(Broader Impacts)

1. To what extent do the proposed activities suggest and explore **creative, original,** or **potentially transformative** concepts?
2. Is the **plan** well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a **mechanism to assess success**?
3. How well **qualified** is the **individual, team, or organization** to conduct the activities?
4. Are adequate **resources** available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

**Additional Solicitation-Specific Review Criteria for STC Preliminary Proposals**

When considering intellectual merit and broader impacts criteria (above), reviewers will be asked to consider the vision and potential impact of the research proposed, along with the need for the center funding mechanism. Reviewers will also evaluate and comment on the each of the following areas, including the questions listed.

* **Rationale for an STC**
  + Is the vision for the project compelling enough to justify the large-scale focus of resources? If so, is an STC the appropriate vehicle?
  + Why is an STC investment warranted at this time?
  + Are the anticipated scientific and societal legacies substantive and transformative?
* **Research Plan**
  + Are the plans for research and holistic integration appropriately ambitious, leading to significant strategic outcomes?
  + Does the proposal address potential bottlenecks and technical challenges?
  + Does the proposal make a case for the feasibility of significant progress over the next five years?
* **Partnerships and Participants**
  + Is the team of partner organizations and personnel assembled for the proposed Center appropriate and essential?
  + Is the role of each participant clear?
  + Does the team have unique strengths relative to the other groups working in related fields?
* **Integration Strategies**
  + Are the leadership and management strategies promoting a center culture and are the foci of education, knowledge transfer and broadening participation strategically supporting the goals of the Center?