OBJECTIVES: The Science and Technology Centers (STCs) support innovative, complex research and education projects that require large-scale and long-term awards. As first defined in the 2019 solicitation, “STCs focus on creating new scientific paradigms, establishing entirely new scientific disciplines and developing transformative technologies which have the potential for broad scientific or societal impact.” This STC competition is open to all areas of science and engineering supported by NSF and there are no priority areas identified in the solicitation.

STCs should involve a range of partners including institutions of higher education, national laboratories, industry, international partners, and other public or private entities. Similar to the previous STC competition, NSF is encouraging participation of underrepresented groups and non-traditional partners in STC teams. According to the solicitation, “Centers may use either proven, or innovative mechanisms based on the relevant literature, to address issues such as recruitment, retention, success, and career progression of all individuals in the Center.” NSF seeks to ensure a diverse portfolio of centers including “diversity among types of institutions leading centers and diversity amongst center directors.” STCs are expected to foster excellence in education and the integration with research, as well as play a major role in “encouraging future scientists, engineers, and educators to take risks in pursuing discoveries and new knowledge.” Centers are also required to carry out activities to advance knowledge transfer.

All STCs must:

- Be focused on exceptionally innovative, complex research and education projects that require large-scale, long-term funding;
- Be based at an institution of higher education which assumes responsibility for oversight of subawards to all other partner institutions;
- Be directed by a faculty member with experience in leading research teams;
- Demonstrate institutional commitment to achieving strategic goals that are shared by the lead and other partnering institutions;
- Establish multi-institutional collaborations or linkages with other universities/colleges, national laboratories, research museums, private sector research laboratories, state and local government organizations, and international collaborations, as appropriate;
- Develop a management plan that integrates the research, education, broadening participation, and knowledge transfer activities across all partners and affiliates;
- Incorporate diverse teams at all organizational levels of the Center that include members of groups underrepresented in STEM;
- Provide research and education opportunities for U.S. students, postdoctoral researchers and faculty that will result in outcomes consonant with the Center’s goals;
- Facilitate knowledge transfer through significant intellectual exchange among various types of institutions and organizations (e.g., nonprofit organizations; national laboratories; industry; Federal, state, and local governments); and,
• Establish and convene at least annually an External Advisory Committee to provide guidance, advice, and oversight.

**FUNDING INFORMATION:** STCs may propose a budget of up to $6 million per year for an initial five-year period, with the possibility of an additional five years of funding.

**ELIGIBILITY RESTRICTIONS:** A PI or co-PI on one proposal in this competition may not be a participant in another STC proposal under review in the same competition. Preliminary and invited full proposals may be submitted by U.S. academic institutions with doctoral degree-granting research and education programs in any area of research supported by NSF. The PI is required to be full-time faculty and must “have an established record of leading research teams.”

**INTERNAL SELECTION PROCESS:** BUMC Interested investigators should submit the following materials listed below via InfoReady Review by Friday, Nov. 19, 2021. If you are a BMC investigator and wish to apply for this opportunity, please contact Jennifer Fleming, Director of Foundation Relations and Government Grants at jennifer.fleming@bmc.org by Wednesday, Nov. 10, 2021.

- Questions outlined in InfoReady Review application;
- A letter of recommendation from the appropriate department chair or dean;
- A brief statement (up to 2 pages) by the candidate describing their scientific achievements and proposed project including any potential partner organizations;
- A brief budget outline for the proposed research;
- Up-to-date CV or biosketch for all senior personnel.

A faculty committee drawn from both campuses will review internal proposals and select nominees.

**DEADLINES:** Internal Materials: Friday, Nov. 19, 2021  |  Sponsor Deadline: Tuesday, Feb. 1, 2022

*In requesting to be considered for this submission funding opportunity, you are making a commitment, if selected, to submit your proposal to the sponsor in a timely manner and to Sponsored Programs in accordance with the Proposal Submission Policy.*