

CALL FOR PROPOSALS

The Stony Brook Cancer Center (SBCC) in partnership with College of Engineering and Applied Sciences is pleased to announce pilot funding opportunities in Engineering, Physical Sciences and Oncology

Despite significant investments in research and the 'War on Cancer' launched in the 1970's, cancer remains among the top causes of death for Americans. With significant successes in the prevention and management of heart disease, cancer deaths are expected to replace heart disease as the number one cause of death by the end of this decade. Importantly, this shift will occur first for persons in the middle years of their life (45-64 years) where malignant neoplasms are currently near equal to heart disease as leading cause of death. This poses a significant burden to society in terms of quality life years lost to cancer. Thus, despite some progress, cancer remains a highly recalcitrant public health burden for which new and bold initiatives are needed.

The principles of physical science and engineering have contributed toward advances in oncology for many decades, particularly in materials science and advanced imaging. Based on major practice changing contributions to the field and promise for future advances, this year saw the first ever special conference hosted by the American Association of Cancer Research (AACR) celebrating the contributions of engineering and physical scientists to cancer research. This reflects recognition of the importance of the physical sciences and engineering in understanding biological processes including disease and transformative thinking leading to a series of critical initiatives and investment at the National Institute of Health including the NIBIB, Physical Sciences in Oncology, and NCIs Alliance in Nanotechnology aimed at engaging scientist across seemingly disparate disciplines to work together to tackle the big challenges in cancer.

To capitalize on this momentum and unique Stony Brook University strengths in engineering, mathematics and physical sciences, we are pleased to announce the availability of pilot research funds aimed at integrating physical science, mathematics and engineering through team science approaches to the study of significant and unanswered questions in cancer biology that contribute directly to cancer deaths.

Pilot research projects will be expected to have strong potential for future support by external sources. Successful projects will have a well-defined focus on Physical Sciences and Oncology; articulate a case for how the pilot project will help build a firm hypothesis and/or scientific or clinical rationale that addresses a significant question in the field of oncology. Innovation and significance of the problem to be investigated will be review driving criteria. ***Proposals with investigator teams representing different fields (medicine, engineering, physical/bio sciences) will be given priority. All career levels are encouraged to apply.***

Award amounts

Awards will be made up to \$100,000 for up to two years to spend funds. Each winning team will get \$50K in Year 1 and, provided sufficient progress is accomplished towards development of a competitive grant application to sustain the research activity, the team will receive \$50K in Year 2.

Key Dates

KICK-OFF OF NEW INITIATIVE QUESTION AND ANSWER SESSION: December 16, 2016:

PROPOSAL DUE DATE: February 20, 2017 by 11:59 pm.

NOTIFICATION OF AWARD: April 1, 2017

Proposals should be submitted by email to Samir.Das@stonybrook.edu on or before the due date.

PROGRESS UPDATES WILL BE REQUESTED AS FOLLOWS:

- 6-month progress report
- 12-month final report or progress report and presentation at annual retreat
- 24-month final report for two year proposals

Format for Application

A complete application must include the following **ALONG WITH A COPY OF AN NIH BIOGRAPHICAL SKETCH** in a single PDF file.

1. Proposal title:
2. Principal Investigator(s): Name, Title/rank, Department, contact information

Briefly, answer each of the following:

3. What is the gap in knowledge or paradigm?
4. How does this specifically relate to a cancer problem?
5. What is your idea?
6. Clearly describe your experimental approach for addressing this question?
7. How will your research fill the stated gap if successful?
8. How does your research benefit from the integration of expertise from the cancer biological or clinical sciences with expertise from physical sciences or engineering?
9. How will these pilot funds be used toward securing extramural research funding? Please include target funder and timeline for submission.
10. What are the key references that support your idea? (1 page maximum)
11. What is the dollar amount and funding period (max 2 years) that you are requesting?
12. Is this research part of a larger research vision in the department or college? If yes, please describe.
13. Are there any resources (match) available for use in support of the proposed project (i.e., departmental or other)? If yes, describe.

Please Read And Make Note Of The Following When Preparing Your Proposal:

- Awards will be made up to \$100,000 for up to two years to spend funds in increments of \$50,000. *Year 2 funds are contingent on meeting stated milestone that should include a plan and timeframe for securing external research funding. A targeted submission for extramural support by early to mid-year 2 meets and ideal standard to benchmark against.*
- *Proposals with investigator teams representing different fields (medicine, engineering, physical/bio sciences) will be given priority. All career levels are encouraged to apply.*
- Funding is available for salaries and benefits of post-doctoral fellows, students, technicians, and other *non-faculty* project personnel, technical supplies, equipment and miscellaneous expenses.
- This budget does not require overhead, but does require employee benefits at the same rate as extramural proposals.
- Grant funds cannot be used for travel that is not directly related to the research proposed in the project.
- Funds cannot be used to support faculty travel or attendance at conferences, outside consultants, or office equipment, including computers unless specifically justified.
- Expenditures on travel or hourly wages for consultant fees must be approved
- By submitting, the PI assures that he or she will be present at the University for the duration of the grant period.
- If a non-University Partner is involved, include a Letter of Support from Partner(s) and detailed justification of the uniqueness of the expertise provided by the partner. This letter is part of the proposal packet that will be reviewed by panel members. At a minimum, this letter should include:
 - i. a description of existing collaboration with the researcher;
 - ii. an assurance that the partner has participated in the project development and that the proposal is aligned with a significant contribution from the partner;
 - iii. a description of the role the partner will play in the research;
 - iv. a description of any research products that the partner expects from the research.