



## Current Funding Opportunities – December 2018

**1. Physical Sciences-Oncology Network (PS-ON): Physical Sciences-Oncology Projects (PS-OP) (U01 Clinical Trial Optional) ([PAR-19-101](#))****Sponsor:** NIH NCI

**Synopsis:** This Funding Opportunity Announcement (FOA) invites U01 cooperative agreement applications for Physical Science-Oncology Projects (PS-OP). The goal of the Physical Sciences-Oncology Network (PS-ON) is to foster the convergence of physical sciences approaches and perspectives with cancer research to advance our understanding of cancer biology and oncology by forming transdisciplinary teams of physical scientists and cancer biologists/physician scientists. Examples of physical scientists may include engineers, physicists, mathematicians, chemists, and computer scientists. The PS-OPs, individually and as a collaborative Network along with other PS-OPs and the Physical Sciences-Oncology Centers (PS-OC), will support transdisciplinary research that: (1) establishes a physical sciences perspective within the cancer research community; (2) facilitates team science and field convergence at the intersection of physical sciences and cancer research; and (3) collectively tests physical sciences-based experimental and theoretical concepts of cancer and promotes innovative solutions to address outstanding questions in cancer research.

**Application Receipt Date:** January 30, 2019; July 30, 2019; January 30, 2020; July 30, 2020, by 5:00 PM local time of applicant organization.

**2. Cancer Tissue Engineering Collaborative: Enabling Biomimetic Tissue-Engineered Technologies for Cancer Research (R01 Clinical Trial Optional) ([PAR-19-113](#))****Sponsor:** NIH NCI

**Synopsis:** This Funding Opportunity Announcement (FOA) will support the development and characterization of state-of-the-art biomimetic tissue-engineered technologies for cancer research. Collaborative, multidisciplinary projects that engage the fields of regenerative medicine, tissue engineering, biomaterials, and bioengineering with cancer biology will be essential for generating novel experimental models that mimic cancer pathophysiology in the context of a testable cancer research hypothesis. The projects supported by this FOA will collectively participate in the Cancer Tissue Engineering Collaborative (TEC) Research Program.

The Cancer TEC Program will (1) catalyze the advancement of innovative, well characterized in vitro and ex vivo systems available for cancer research, (2) expand the breadth of these systems to several cancer types, and (3) promote the exploration of cancer phenomena with biomimetic tissue-engineered systems.

**Application Receipt Dates:** [Standard dates](#) apply, by 5:00 PM local time of applicant organization

**3. Improving Outcomes in Cancer Treatment-Related Cardiotoxicity (R21 Clinical Trial Optional) ([PA-19-111](#))**

**Sponsor:** NIH NCI

**Synopsis:** This Funding Opportunity Announcement (FOA) encourages collaborative applications that will contribute to the identification and characterization of patients at risk of developing cancer treatment-related cardiotoxicity. The primary intent is to mitigate cardiovascular dysfunction while optimizing cancer outcomes. To accomplish this, methods that evaluate cardiovascular risk prior to treatment and integrate evidence-based cancer treatment regimens with cardiovascular screening, diagnostic, and/or management strategies are sought. Research applications should focus on mitigation/management of adverse effects associated with anti-cancer treatments including: cytotoxic chemotherapies, targeted agents, immunomodulatory therapies and radiation (that occur during cancer treatment and/or long-term survivorship) as defined by cardiac and/or vascular specific common terminology criteria for adverse events (CTCAE).

**Application Receipt Dates:** [Standard dates](#) apply, by 5:00 PM local time of applicant organization