American Cancer Society Awards New Research and Training Grants

Peer review council met virtually to keep cancer research funding moving in first of two cycles for 2020

The American Cancer Society, the largest non-government, not-for-profit funding source of cancer research in the United States, has approved funding for 79 research and training grants totaling $36,165,100 in the first of two grant cycles for 2020. Grant applications were reviewed and approved remotely in light of the coronavirus epidemic. The grants will fund investigators at 59 institutions across the United States; 73 are new grants while 6 are renewals of previous grants. The grant starting date was moved from July 1 to September 1, 2020 to accommodate institutions that are partially shut down due to the epidemic.

Highlights of the latest cycle include:

Matthew J. Sikora, PhD, Univ. of Colorado, Denver Dr. Sikora and team will work to identify strategies and potential drugs to undermine estrogen receptor activity in invasive lobular carcinoma, which affects more than 44,000 women in the U.S. every year. They hope their work targeting the MDC1 protein will allow them to combat resistance to drugs that target estrogen in this cancer.

Haiying Cheng, MD, PhD, Albert Einstein College of Medicine Dr. Cheng will focus on metastatic lung cancer, specifically how a particular gene (RICTOR) may contribute to the spread and survival of cancer cells in distant metastatic sites. Their findings have shown that RICTOR amplification may be a new target in lung cancer metastases could open up a new avenue for the discovery of novel treatment strategies that could eventually lead to better treatment outcome and longer survival for some lung cancer patients.

Ankur Nagaraja, MD, PhD, Dana-Farber Cancer Institute This research aims to address what Dr. Nagaraja believes is a fundamental cause of most stomach and esophageal (gastroesophageal) cancers: that most gastroesophageal cancers arise following a catastrophic disruption of the genome where the cancer cell acquires extra copies of many chromosomes They hope to gain a better understanding of how a normal stomach or esophagus cell transforms into stomach or esophageal cancer, with the ultimate goal of using this knowledge to develop new, more effective therapies that attack gastroesophageal cancer cells where they are most vulnerable.

Cassandra E. Callmann, PhD, Northwestern University Dr. Callman's lab hopes to harness the power of nanotechnology to accelerate the development of a cancer vaccine for triple-negative breast cancer (TNBC). Their early studies have found nanoscale vaccines show remarkable anticancer efficacy in mouse models of TNBC, with 6 of 9 animals being completely cured.

Alejandra H. de Mendoza, PhD, Georgetown University Dr. De Mendoza will evaluate whether a culturally targeted video can increase genetic testing and counseling in Latina women, who have double the risk of having a BRCA1 or BRCA2 mutation compared to the general population yet have lower awareness and use of genetic counseling and testing. A pilot study showed the video led to significantly increased knowledge, and 60% of viewers subsequently attending genetic counseling, compared to national estimates of <10%.

Carolyn S. Harris, BSN, University of California, San Francisco Patients with cancer, as well as cancer survivors, often experience more than one symptom at the same time. Ms. Harris's research shows that it is very common for cancer patients and survivors to report having 10 symptoms at the same time, with those symptoms having a negative impact on patients' and survivors' ability to function and overall quality of life. This research will be the first to investigate whether changes in three genes are associated with two common symptom clusters; this knowledge could then be used to develop new interventions to prevent or treat them.

The American Cancer Society Extramural Research program currently supports research and training in a wide range of cancer-related disciplines at more than 200 institutions. With an investment of more than $4.9 billion since 1946, the ACS is the largest private, not-for-profit source of cancer research funds in the U.S., and has funded 49 researchers who have gone on to be awarded the Nobel Prize. The program primarily funds early career investigators, giving the best and the brightest a chance to explore cutting-edge ideas at a time when they

might not find funding elsewhere.

The Council for Extramural Research also approved 73 grant applications for funding, totaling $38,988,850 that could not be funded due to budgetary constraints. These “Pay-If” applications represent work that passed the Society’s multi-disciplinary review process but are beyond the Society’s current funding resources. They can be and often are subsidized by donors who wish to support research that would not otherwise be funded. In 2019, $5.1 million in additional funding helped finance 24“Pay-If” applications.

For more information about the American Cancer Society Research Program, please visit http://www.cancer.org/research.