American Cancer Society Awards New Research and Training Grants

Nation's largest non-government, not-for-profit funder of cancer research approves 78 grants totaling nearly \$40 million in second of two cycles for 2017

ATLANTA – October 2, 2017– The American Cancer Society, the largest non-government, not-forprofit funding source of cancer research in the United States, has approved funding for 78 research and training grants totaling \$39,836,250 in the second of two grant cycles for 2017. The grants will fund investigators at 57 institutions across the United States; 63 are new grants while 15 are renewals of previous grants. The grants go into effect January 1, 2018. Highlights of the current cycle:

Two individuals have been awarded the prestigious five-year renewable American Cancer Society Research Professorship:

- Johannes Walter, PhD of Harvard Medical School in Boston will use cell-free extracts to investigate how the DNA replication machinery overcomes obstacles in the DNA template, including chemical damage and transcription complexes. By studying this process, he hopes to identify new DNA repair proteins and pathways that maintain our genomes. The work is expected to elucidate how cancer develops and to identify new targets for cancer chemotherapeutics.
- David M. Sabatini, MD, PhD of Whitehead Institute for Biomedical Research looks to maximize the precise targeting of cancer drugs into the relevant tissues by exploiting the specificity of transport proteins embedded in lipid membranes on the surface and within cells. If successful, this approach could address a major challenge in drug delivery and could lead to safer and more effective cancer therapies.

Two American Cancer Society Research Professors were renewed for 5 year terms. They are: **David Largaespada, PhD of the University of Minnesota**, and **Yang Shi, PhD of Boston Children's Hospital**. Other highlights of the new grants include:

- Andrea J. Berman, PhD, of The University of Pittsburgh is investigating how a protein called LARP1 physically interacts with other molecules in ovarian cancer cells to cause cell growth. By understanding the structure of this protein, potential new drugs could be developed to inhibit cancer growth.
- Paula Hurley, PhD, of Johns Hopkins University in Baltimore will look at the role of SPARCL1 gene expression in prostate cancer. The lack of this gene's expression has been linked to a higher risk of metastatic recurrence and death from prostate cancer. The team has shown that SPARCL1 functions as a barrier to local tumor progression and metastatic development. They hope the work will lead to a better understanding of how cancers metastasize, and potentially lead to therapeutics specifically targeting SPARCL1.
- Kian-Huat Lim, MD, PhD, of Washington University, St. Louis and team will build upon their recent finding that pancreatic cancer cells use their innate immunity to armor themselves, a self-defense mechanism that is usually summoned when cells are injured or invaded by microorganisms, making them highly aggressive and resistant to chemotherapeutics and immunotherapy. They will explore whether the defense mechanism can be deactivated using the master switch that controls the innate immune pathway. If successful, the work could yield a highly promising therapy for a cancer with few treatment options.
- Xuehong Zhang, MD, ScD, of Brigham and Women's Hospital in Boston will assess the role of yogurt intake in relation to the risk of colorectal cancer (CRC). While laboratory evidence suggests a beneficial role of yogurt in colorectal cancer, relevant human studies to

date are limited, subject to potential bias, or have examined overall dairy intake, not yogurt specifically. Building upon their preliminary data showing a significant reduction in CRC risk associated with yogurt intake, they will further assess the association in other existing databases.

- Abby Rosenberg, MD, MS, of Seattle Children's Hospital will examine whether a brief, one-on-one intervention targeting stress-management/mindfulness, goal-setting, positive reframing, and meaning-making can address poorer psychosocial outcomes seen among adolescent and young adult (AYA) cancer patients. Cancer among AYAs is particularly difficult because the age-related developmental challenges of identity, relationships, and vocation may add to the burden of cancer. Findings from this research will aid in the development of larger, multi-center clinical studies designed to test the intervention among AYAs seeking to improve patient and family well-being and potentially extending life and reducing the burden of illness.
- Joann B. Sweasy, PhD, of Yale University will oversee a three-year grant supporting the work of young faculty at Yale. The grants provide essential seed support for beginning researchers, support that may often help tip the balance of a nascent research career toward devoting special attention to the cancer problem.

Since 1946, the American Cancer Society has funded research and training of health professionals to investigate the causes, prevention, and early detection of cancer, as well as new treatments, cancer survivorship, and end of life support for patients and their families. In those 71 years, the American Cancer Society's extramural research grants program has devoted more than \$4.6 billion to cancer research and is honored to have given funding to 47 investigators who went on to win the Nobel Prize.

The Council for Extramural Research also approved 80 grant applications totaling \$44,075,250 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 2016, more than \$9 million in additional funding helped finance 35 "pay-if" applications.

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