American Cancer Society Awards 94 New Research and Training Grants at 61 Institutions Nationwide

Atlanta 2009/10/07 -The American Cancer Society, the largest non-government, not-for-profit funding source of cancer research in the United States, has awarded 94 new national research and training grants totaling $45,097,000 to 61 institutions nationwide in the second of two grants cycles for 2009. The grants go into effect beginning January 1, 2010.

For more than 60 years, 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. Since its founding in 1946, the American Cancer Society's extramural research grants program has devoted about $3.4 billion to cancer research and has funded 42 researchers who have gone on to win the Nobel Prize. Below are highlights of new grants.

Cancer Causes

Julian Sage, PhD, Stanford University has developed a mouse model of small cell lung cancer that may allow him to identify lung cancer stem cells. Those cells could provide an important platform for the development of more effective techniques for early detection and new treatments.

Curtis Schneider, PhD, California Institute of Technology, working with Dr. Jackie Barton, will investigate whether the recently identified loss of DNA repair pathways in tumor cells can be exploited for both therapy and for diagnostics, and has devised a strategy to develop compounds that could mark cells in the colon before they progress to cancer.

Titia de Lange, PhD, Rockefeller University, a new ACS Research Professor, is studying the role of telomeres in cancer. Telomeres are the protective caps on the end of chromosomes that limit how many times the cell can divide. Unlike normal cells, cancer cells develop ways to maintain the length and function of telomeres so they survive no matter how many times they divide.

Nicole Neel, PhD, Lineberger Comprehensive Cancer Center, University of North Carolina-Chapel Hill, working with Channing Der, PhD, is focusing on ways to block the RalB protein which is a target of the KRAS oncogene that is present in more that 90 percent of pancreatic cancers. RalB may be a key to allowing pancreatic tumor cells to metastasize.

Kyuson Yun, PhD, The Jackson Laboratory, is investigating whether a protein expressed at high levels in aggressive forms of many cancers including breast, colon and pancreas, may be specifically expressed in cancer stem cells in glioblastoma, the most common form of brain cancer. The study will provide a deeper understanding of the cancer stem cells and may provide insight into novel approaches to killing these cells.

Cancer Prevention

James F. Wharam, MB, BCh, BAO, Harvard Pilgrim Health Care, is investigating whether a new type of health insurance – high-deductible health plans (HDHPs) - may threaten patients' access to crucial medical care by lowering screening rates. It will be the first study to examine this question on a national scale and the first to use a cutting-edge, innovative method for detecting the populations most at risk.

Ellen P. McCarthy, MPH, Ph.D., Beth Israel Deaconess Medical Center, and her team will study the potential benefit of screening mammography in different clinical subgroups, particularly women age 75 and older, where optimal screening strategies for breast cancer are uncertain.

Six preventive medicine residency programs that offer special training tracks in cancer prevention and control were funded. These renewable grants were awarded to the Roswell Park Cancer Institute, Morehouse School of Medicine, New York City Department of Health, University of California, San Diego, Griffin Hospital, and for the first time, the California Department of Public Health. The goal of this program is to increase the number of physician experts in disease prevention and health promotion dedicated to changing the impact of cancer on both

individuals and population groups.

Detection and Diagnosis of Cancer

Linda T. Nieman, PhD, University of Texas MD Anderson Cancer Center, will further develop and refine a new, non-invasive dual optical approach for identifying and localizing early stage bladder cancer. This approach has the potential to significantly add to the understanding of bladder cancer and to aid clinicians in detection and in assessment of therapeutic effectiveness for bladder cancer.

Cancer Treatment

Jennifer Cochran, PhD, Stanford University, is using a powerful technology called “directed evolution” to engineer designer proteins for use as therapeutic or diagnostic agents for cancer.

David Kadosh, PhD at the University of Texas Health Science Center At San Antonio is studying the invasive properties of one of the major fungal pathogens, Candida, which can be lethal to immunosuppressed cancer patients. Joseph Kissil, PhD, Wistar Institute is testing a series of potent drug candidates that interact with signal transduction pathways in cancer cells, which carry information critical to the functions and growth of cells and tissues.

Joan Garrett, PhD, Vanderbilt University, working with Dr. Carlos Arteaga, is studying the development of drug resistance in breast cancer, particularly in relation to a gene related to HER2, called HER3.

Michelle C. Fingeret, PhD University of Texas, M.D. Anderson Cancer Center, is studying the devastating effects on quality of life of patients as they experience significant changes to their physical appearance and bodily function following treatment for facial cancer; and is studying an intervention that may alleviate their suffering.

Hendrik van Deventer, MD, University of North Carolina at Chapel Hill, will study a largely unstudied type of cell, called fibrocytes, which are critical for tumor metastasis. Dr van Deventer is exploring the possibility that two classes of drugs already in existence may block the function of the fibrocytes.

Cancer Survivorship

Qian Lu, MD, PhD, University of Houston, will test the cultural sensitivity and efficacy of an expressive writing intervention, demonstrated to provide psychological benefit to cancer survivors, among Chinese-speaking breast cancer survivors. Asian Americans are the only ethnic group with an increasing rate of breast cancer.

End of Life Support for Cancer Patients and Their Families

Kevin L. Rand, PhD, Indiana University, is studying the dilemma patients face near the end of life in making healthcare decisions in pursuit of multiple, potentially conflicting goals. These include choosing aggressive treatments in hopes of surviving as long as possible, or minimizing the burden of disease; and spending more time with family and loved ones, by choosing less aggressive interventions.

The American Cancer Society’s research and training program emphasizes investigator-initiated, peer-reviewed proposals, and has supported groundbreaking research that has led to critical discoveries leading to a better understanding of cancer and cancer treatment. Grant applications are ranked on the basis of merit by one of several discipline-specific Peer Review Committees, each of which includes 12 to 25 scientific advisors or expert reviewers. The Council for Extramural Grants, a committee of senior scientists, recommends funding based on the relative merit of the applications, the amount of available funds, and the Society's objectives. No member of the American Cancer Society's Board of Directors or National Assembly may serve on a Peer Review Committee or as a voting member on the Council for Extramural Grants.

The Council for Extramural Grants also approved 74 research grant applications that could not be funded due to budgetary constraints. These “pay-if” grants represent work that passed the Society’s multi-disciplinary review process but go beyond the Society’s current funding resources, and which will be funded of additional monies become available. These grants serve as an important reminder that there continues to be promising research we would like to fund but cannot with our current resources.

About the American Cancer Society

The American Cancer Society combines an unyielding passion with nearly a century of experience to save lives and end suffering from cancer. As a global grassroots force of more than three million volunteers, we fight for every birthday threatened by every cancer in every community. We save lives by helping people stay well by preventing cancer or detecting it early; helping people get well by being there for them during and after a cancer diagnosis; by finding cures through investment in groundbreaking discovery; and by fighting back by rallying lawmakers to pass laws to defeat cancer and by rallying communities worldwide to join the fight. As the nation's largest non-governmental investor in cancer research, contributing about $3.4 billion, we turn what we know about cancer into what we do. As a result, more than 11 million people in America who have had cancer and countless more who have avoided it will be celebrating birthdays this year. To learn more about us or to get help, call us any time, day or night, at 1-800-227-2345 or visit cancer.org.

###

David Sampson
Director, Medical & Scientific Communications
American Cancer Society
213 368-8523
david.sampson@cancer.org