American Cancer Society Awards 90 New Research and Career Development Grants Totaling $45 Million

Nation's largest non-government, non-profit funder of cancer research also announces recipients of the ACS Clinical Research Professor Award

ATLANTA, April 13, 2023 – The American Cancer Society (ACS), the largest non-government, non-profit funding source of cancer research in the United States, has approved funding for 90 new Extramural Discovery Science (EDS) research and career development grants totaling more than $45 million. The grants will fund investigators at 67 institutions across the United States starting in 2023.

"These new research and career development grants will not only aid in the discovery of new treatments for cancer patients and care for survivors, but find better ways to help overcome disparities associated with the disease," said Dr. Elvan Daniels, senior vice president, center for diversity in cancer research at the American Cancer Society. "It's very fulfilling to be able to offer these needed funds to help drive these areas of study."

ACS seeks to improve the lives of cancer patients, families, and caregivers through research, patient services, and advocacy. To maximize impact, ACS has established six priority research areas to advance our mission: etiology or causes of cancer, obesity/healthy eating and active living, diagnosis and screening, treatment, survivorship, and health equity across the continuum. These topics will require fundamental, preclinical, clinical, and implementation research as well as multidisciplinary research teams to tackle the complexities of cancers and cancer care.

"Our research goal is to find answers that help save lives from cancer and that means to fund the most innovative cancer research," said Dr. William Dahut, chief scientific officer at the American Cancer Society. "This new group of grantees represents the very best to help break new ground in cancer care and treatment.

Requiring that EDS grant applications align with identified high-potential areas for significantly reducing the cancer burden in the U.S. is critical. The number of research priority areas is relatively few, yet these topics cast a wide net and span the full cancer research continuum. Highlights from each of the focus areas of funding in the current grant cycle include:

ETIOLOGY & CAUSE
Motoki Takaku, PhD
University of North Dakota School of Medicine
The function of GATA3 and its mutations in breast cancer
Research Scholar Grant
GATA3 is a transcription factor that is frequently mutated in breast cancers. Dr. Takaku's group has developed a novel assay to investigate GATA3 functions and the mechanisms through which GATA3 mutations promote luminal breast cancer. This work will inform the development of new therapeutic strategies for luminal breast cancers.

OBESITY/HEALTHY EATING & ACTIVE LIVING
Scherezade Mama, DrPH
University of Texas M.D. Anderson Cancer Center
Harmony & Health: A culturally adapted mind-body intervention to reduce sitting time and improve psychosocial well-being in Black adults
Research Scholar Grant
Physical inactivity and sedentary behaviors are modifiable risk factors for some forms of cancer. Dr. Scherezade's group will test their novel intervention, Harmony & Health, which combines yoga with relaxation and spirituality to reduce sitting time and increase movement among Black adults compared with a health education program. This work will be done in partnership with the local community, including more than 75 local churches, and will also examine the effects on the well-being and quality of life of participants. This research is critical for advancing health equity and promoting active living among Black adults who are physically inactive and at high risk of

cancer.

DIAGNOSIS & SCREENING

Heather Gardner, DVM, PhD
Trustees of Tufts College
Interrogating a multi-parameter liquid biopsy diagnostic in osteosarcoma
Research Scholar Grant

Blood or liquid biopsy tests can help identify cancers based on mutations in DNA from cancer cells. However, the changes in DNA that occur in osteosarcoma, a bone cancer most often diagnosed in children, teens, and young adults, are challenging to detect with current blood biopsy tests. Osteosarcoma is common in dogs, making them a suitable model for studying novel approaches prior to translating to pediatric cancer patients. Dr. Gardner's group will identify biomarkers for osteosarcoma using samples from canine and human pediatric osteosarcoma patients. This work will advance knowledge and approaches for screening and diagnosis of osteosarcoma for dogs and humans.

TREATMENT

Daniel Sherbenou, MD, PhD
University of Colorado Anschutz Medical Campus
Drug Susceptibilities of Multiple Myeloma Subpopulations in Multi-Drug Resistant Patients
Research Scholar Grant

Drug resistance is a major problem in the treatment of patients with multiple myeloma. Dr. Sherbenou's group has developed a novel platform for profiling the drug sensitivity of multiple myeloma samples from patients as drug resistance emerges. This work will advance knowledge about the mechanisms of drug resistance and will inform the clinical development of more effective treatment strategies for patients with drug-resistant multiple myeloma.

Jordan Winter, MD
University Hospitals Cleveland Medical Center
Wild-type IDH1 programs the immune response to pancreatic cancer
Mission Boost Grant Stage II

Effective treatments are urgently needed for pancreatic cancer, one of the deadliest cancers in the U.S. Dr. Winter's group has initiated a clinical trial investigating an anti-IDH1 drug in combination with chemotherapy in patients with resectable pancreatic cancer. The effects of this novel treatment combination on immune cell function will be examined. This research will advance knowledge about the mechanisms of action of targeting IDH1 and may lead to improved treatments for pancreatic cancer.

SURVIVORSHIP

Mallory Taylor, MD
Seattle Children's Hospital
Neuroimmune Stress Biomarkers and Psychosocial Outcomes in Adolescents and Young Adults with Cancer
Clinician Scientist Development Grant

Few studies have examined the biobehavioral mechanisms linking psychosocial and clinical outcomes in adolescents and young adults living with cancer. Dr. Taylor's group will study neuroimmune stress biomarkers and psychosocial outcomes in teenage patients with cancer, including those undergoing bone marrow transplant. This work will advance understanding of the biology linking psychological and medical outcomes in young patients with cancer.

HEALTH EQUITY ACROSS THE CANCER CONTINUUM

Kira Bona, MD
Dana-Farber Cancer Institute
Pediatric RISE: Pilot Randomized Feasibility of a Novel Universal Basic Income Health Equity Intervention
Discovery Boost Grant

Poverty is associated with worse outcomes among children with cancer. Dr. Bona's group has developed the Pediatric Resource Intervention to Support Equity (PediRISE), which provides low-income families with unrestricted cash transfers. The PediRISE intervention will be refined based on parent feedback and a

randomized feasibility trial. This work will directly address health equity by targeting poverty as a modifiable risk factor in patients with pediatric cancer.

The ACS Extramural Discovery Science program currently supports research and training in a wide range of cancer-related disciplines at 183 institutions. With an investment of more than $5 billion since 1946, the ACS 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.

CLINICAL RESEARCH PROFESSOR AWARD

ACS is also excited to announce three new recipients of the ACS Clinical Research Professor Award. The ACS Clinical Research Professor Award is a highly honorific award to investigators who have made seminal contributions that have changed the direction of cancer research. It recognizes exceptional track records in cancer control research that has changed the direction of clinical, psychosocial, behavioral, health policy, or epidemiologic cancer research, as well as leadership and mentoring in cancer research.

Edward Giovannucci, MD, ScD
President and Fellows of Harvard College, Harvard T. H. Chan School of Public Health
An integrative approach for understanding the role of diet, physical activity, body weight, and cancer
Unhealthy eating is a modifiable risk factor related to a third of cancers in the US. However, most research studies take a reductionist approach and consider one food item at a time. Dr. Giovannucci's research applies a comprehensive framework that considers the relationships between multiple lifestyle factors, including diet, physical activity, and body weight, and how the combined actions of these factors influence cancer risk. This work will help identify dietary and physical activity patterns and tailored interventions to reduce the risk of cancer.

Chanita Hughes-Halbert, PhD
University of Southern California
Clinical Research Professor in Cancer Health Equity
Advancing cancer health equity requires addressing multilevel social determinants of health and access to care. Dr. Hughes-Halbert's research will take a data-driven, translational approach to develop, implement, and evaluate innovative solutions to understand and address primary drivers of lung cancer disparities. In partnership with patient advocates, community stakeholders, and health care providers, Dr. Hughes-Halbert will conduct behavioral and population-based research to understand disparities and multilevel determinants of lung cancer risk and screening behaviors and to improve access and uptake of lung cancer screening through a social determinants of health patient navigation intervention.

Michael Pignone, MD
Dell Medical School at The University of Texas at Austin
Promoting mailed interventions to increase colon cancer screening
Evidence-based strategies to increase colorectal cancer screening are available but poorly implemented. Dr. Pignone's group will reach underserved populations in Texas and nationally through widespread implementation of mailed interventions to increase colon cancer screening. This research will investigate cost-effectiveness to inform resource allocation for cancer screening programs to reduce disparities. Dr. Pignone will also develop a cancer control fellowship training and career mentorship program to grow a diverse workforce of cancer screening and prevention-focused researchers.

The Extramural Discovery Advisory Council also recommended an additional 20 grant applications totaling more than $15.6 million that could not be funded due to budgetary constraints. These "Pay-If" applications represent work that passed the Society's multidisciplinary 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.

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About the American Cancer Society

The American Cancer Society is a leading cancer-fighting organization with a vision to end cancer as we know it, for everyone. For more than 100 years, we have been improving the lives of people with cancer and their families as the only organization combating cancer through advocacy, research, and patient support. We are committed to ensuring everyone has an opportunity to prevent, detect, treat, and survive cancer. To learn more, visit cancer.org or call our 24/7 helpline at 1-800-227-2345. Connect with us on Facebook, Twitter, and Instagram.

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