

American Cancer Society Awards \$28 Million New Research and Career Development Grants

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

ATLANTA, May 23, 2024 – The [American Cancer Society](#) (ACS), the largest non-government, non-profit funding source of cancer research in the United States, has approved funding for \$28 million in new Extramural Discovery Science (EDS) research and career development grants. The awards will fund investigators at institutions across the United States starting in July 2024.

"We are very proud to announce these new grant awardees and their critically important research projects," said [Dr. Christina Annunziata](#), senior vice president, extramural discovery science at the American Cancer Society. "These scientists have dedicated their lives to increasing our understanding of better ways to treat and survive cancer and we look forward to partnering with them in our collective mission to help save lives."

ACS seeks to improve the lives of cancer patients, families, and caregivers through research, patient services, and advocacy. These awards require fundamental, preclinical, clinical, population, and implementation/dissemination research as well as multidisciplinary team science to tackle the complexities of cancers and cancer care.

"We are excited these grants will fund a range of innovative research across different cancer types," said [Dr. William Dahut](#), chief scientific officer at the American Cancer Society. "These studies include intervention approaches, and research methodologies that highlight basic molecular research, immunotherapy, preclinical and clinical trials, prospective cohort studies, and even AI and computational machine learning."

During this grant period, there are two new recipients of the ACS Professor Award and two new recipients of the ACS IMPACT Professorship Award. These are highly prestigious awards for investigators who have made seminal contributions in cancer research. The award also recognizes exceptional track records in leadership, service, and mentoring in cancer research. The ACS IMPACT Professor Award was created to help advise ACS in efforts to address the public health burden of prostate cancer through ACS' IMPACT initiative – **Improving Mortality from Prostate Cancer Together**.

ACS Professors

Shuji Ogino, M.D., Ph.D., M.S.

ACS-HKH-Clinical Research Professorship

Brigham and Women's Hospital, Inc.

Project Title: "Integrative Transdisciplinary Study of Early-Onset Colorectal Cancer"

This study will focus on illuminating the contributing factors to the recently observed rise in early-onset colorectal cancer. By combining methods from multiple scientific fields, including epidemiology, cell biology, molecular pathology, spatial microscopy, and computational machine-learning, Ogino will conduct research to gain insight into how genetic, dietary, lifestyle, and other factors influence the development of early-onset colorectal cancer. Linking potential risk factors with specific tumor genomic, microbial, or immune features will shed light on the underlying causes of early-onset colorectal cancer, informing future precision prevention and treatment strategies.

Ann Partridge, M.D., M.P.H.

ACS Clinical Research Professor

Dana-Farber Cancer Institute

Project Title: "Clinical Research Professor"

Partridge is a well-established medical oncologist and leader in conducting clinical research to understand and

improve the treatment and care of people with cancer with a specific focus on adolescents and young adults with breast cancer who are more likely to suffer physically and emotionally after diagnosis than older people. Through this new study, Partridge aims to expand her work to additional adolescent and young adult cancer patient populations, by expanding the evidence base to inform care and interventions to improve treatment outcomes and support quality of life across the broader adolescent and young adult cancer population; disseminating interventions beyond academic centers, to diverse community oncology practices; and creating a workforce of investigators who will continue this work to benefit adolescent and young adults with cancer in the years to come.

IMPACT Professorships

Daniel George, M.D.

ACS IMPACT Professorship in Prostate Cancer

Duke University School of Medicine

Project Title: "Race-based cohort trials to improve outcomes for Black men"

Dr. George is a medical oncologist focused on genitourinary cancers, who has worked extensively in new drug development for prostate patients, particularly prognostic and predictive biomarker development. His research program focused on cancer disparities, and in particular Black men with prostate cancer. He has developed a strong interdisciplinary team of collaborators allowing his work to include real world evidence data for recently approved therapies, implementation science, prostate cancer screening algorithms to improve equity in early detection and testing new treatment combination therapy utilizing pragmatic trial designs. Through his work with IMPACT, he will continue to investigate important differences in patient and provider experiences among men with prostate cancer, particularly for patients from underserved populations.

Christopher Haiman, Sc.D.

ACS IMPACT Professorship in Prostate Cancer

University of Southern California (USC)

Project Title: "ACS IMPACT Research Professorship in Prostate Cancer"

Dr. Haiman is a genetic epidemiologist at USC, who has spent over two decades elucidating the etiology of prostate cancer, with a particular emphasis in men of African ancestry, leading to the discovery of >450 risk loci for prostate cancer, novel genes harboring pathogenic variants that predict aggressive disease and a trans-ancestry polygenic risk score that has substantially advanced our understanding of personalized risk prediction for prostate cancer across diverse populations. As part of his involvement with IMPACT, Dr. Haiman will develop novel biomarkers to better understand the etiology of aggressive disease, as well as to develop and clinically evaluate a risk-based screening approach to improve early detection. These resources will serve as a strong foundation for interdisciplinary training of the next generation of cancer health disparity researchers, with a specific focus on minority researchers from communities at high risk of prostate cancer who have traditionally been underrepresented in public health research.

ACS is also proud to announce two recipients of Mission Boost Stage II grants. The grants are designed to support current and past ACS grantees working to translate their initial basic research into human testing by funding innovative high-risk/high-reward projects.

Mission Boost Stage II Grants

Eben Rosenthal, M.D.

Vanderbilt University Medical Center

Mission Boost Stage II Grantee

Project Title: "Minimally Invasive Lymph Node Staging in Head and Neck Cancer"

Biopsy of the lymph nodes is a critical step in understanding the staging of cancer and determining the subsequent treatment journey for a patient. However, there has been little advancement in the surgical techniques used for this process over the past three decades. While patients with accessible tumors, such as breast cancer, melanoma, and skin cancer are able to be staged via a less invasive sentinel lymph node biopsy, most cancer staging requires a highly invasive procedure to remove of the lymph nodes. Rosenthal's research

focuses on developing a novel approach that uses the intravenous injection of a tracer agent to stage a much wider range of tumor types. Rosenthal's Stage II Mission Boost Grant will determine the clinical utility of this approach in patients with head and neck squamous cell carcinoma compared to the current standard of care through a clinical trial with an additional 24 participants, building on the successful safety and proof of concept work with six initial participants funded through the preceding Stage I Mission Boost Grant.

Rosenthal was the previous recipient of a Research Scholar Grant from 2006-2010 and a Stage I Mission Boost Grant from 2021-2023.

Lei Xu, M.D., Ph.D.

Massachusetts General Hospital

Mission Boost Stage II Grantee

Project Title: "Reprogramming the Tumor Microenvironment to Enhance Immunotherapy"

While immunotherapy approaches have revolutionized treatment for several forms of cancer, these treatments have only had limited effectiveness in advanced ovarian cancer, creating an urgent need for new approaches to stimulate the body's immune system to fight cancer and enhance the efficacy of immunotherapy. Xu's research has demonstrated that ovarian cancer patients treated with losartan, a medication used to control high blood pressure, lived 30 months longer on average compared to those who did not receive the treatment. This work was expanded through a Mission Boost Stage I grant, which found that the combination of losartan with immunotherapy is more effective in reducing tumor size and fluid accumulation in the abdomen of ovarian cancer mouse models compared to using immunotherapy alone. Through this Mission Boost Stage II grant, Xu will collaborate with the Gynecological Oncology team at Massachusetts General Hospital to conduct a prospective phase II clinical trial of losartan therapy in human patients with ovarian cancer, which will provide the safety and response data needed to move forward with a larger trial of losartan, chemotherapy, and immunotherapy.

Xu was the previous recipient of a Research Scholar Grant from 2012-2017 and a Stage I Mission Boost Grant from 2022-2023.

Other research award highlights include:

Biochemistry and Immunology of Cancer Research Program Grants

Silvia Guglietta, Ph.D.

Medical University of South Carolina

Research Scholar Grant

Project Title: "Targeting Complement Anaphylatoxin C3a Receptor to Break Immunotherapy Resistance in Colorectal Cancer"

Responsiveness to immunotherapy in colorectal cancer (CRC) is limited to just 5% of patients with metastatic disease, who develop immunologically "hot" tumors with high immune cell content that can be exploited for immunotherapy. This project will study a proposed approach for switching immunologically 'cold' tumors to 'hot' through the transfer of microbial flora and the subsequent response to immunotherapy. The findings from this work may reveal a novel druggable pathway that could significantly increase the number of patients with CRC who could benefit from immunotherapy.

Zhijie 'Jason' Liu, Ph.D.

UT Health San Antonio

Research Scholar Grant

Project Title: "Enhancer Mechanisms and Interventions in Breast Cancer Endocrine Resistance"

This study will tackle one of the most pressing challenges for breast cancer patients by working to highlight the underlying mechanisms of endocrine therapy resistance which impacts more than 30% of all invasive breast cancer patients. This research will identify the molecular mechanisms by which oncogenic transcription factors regulate breast cancer growth and invasive progression to therapy resistance in preclinical models.

Cell Biology and Preclinical Cancer Research Program Grants

Pavithra Viswanath, Ph.D.

The Regents of the University of California, San Francisco

Research Scholar Grant

Project Title: "Developing a Novel Tracer for Imaging Oncometabolic Activity in Cancer"

Unlike many cancers, obtaining biopsies repeatedly from glioma patients is not desirable because of the complications of repeated brain surgery. As a result, management of glioma patients is heavily dependent on non-invasive magnetic resonance imaging (MRI) methods. However, the presence and disease progression of the IDHmut class of gliomas are particularly difficult to visualize by MRI. This study will validate the ability of a novel method of imaging to visualize metabolically active tumor tissue and report on treatment response at early timepoints in the absence of anatomical alterations in a preclinical model of IDHmut glioma.

Marta Overchuk, Ph.D.

The University of North Carolina at Chapel Hill

Postdoctoral Fellowship Grant

Project Title: "Exploiting the Potential of Photochemically-induced Ferroptosis to De-Escalate Platinum Dose in Metastatic Ovarian Cancer"

Photodynamic therapy (PDT) is a powerful modality that uses light and non-toxic light-sensitive molecules to generate reactive oxygen species that can kill cancer cells with precision through the induction of an alternative cell-killing mechanism called ferroptosis, even in cells that are resistant to chemotherapy. In patients with metastatic ovarian cancer, PDT can be performed safely using lasers and fiber optics after surgery to target remaining tumor cells. This study seeks to improve our understanding of PDT-induced ferroptosis with the overarching aim to inform the future development of therapeutic PDT agents that are specifically tailored to induce this process.

Clinical and Cancer Control Research Program Grants**Jennifer McQuade, M.D.**

University of Texas, MD Anderson

Research Scholar Grant

Project Title: "Neoadjuvant ipilimumab/nivolumab + Microbiota-Directed Prebiotic Dietary Intervention to Optimize Immune Response in Melanoma"

This study will build on previous research demonstrating that cancer patients who are already consuming a diet rich in fiber from prebiotic foods prior to starting immunotherapy have improved responses to treatment by examining whether newly adopting a prebiotic food-enriched diet at the time of treatment has the same enhancing effect. Up to 35 patients will be enrolled in this 14-week trial that will compare the gut microbiome and tumor response to immunotherapy between those adopting the new diet and those maintaining their normal diet.

Manisha Bahl, M.D., M.P.H.

Massachusetts General Hospital

Research Scholar Grant

Project Title: "Unlocking the Black Box: Explainable Artificial Intelligence for Breast Cancer Risk Prediction"

This innovative project aims to use artificial intelligence (AI) incorporating both mammographic imaging and clinical data to develop and evaluate prognostic tools for women diagnosed with high-risk breast lesions to guide informed decision-making about surgical excision, imaging surveillance, and chemoprevention. If successful, this research could ultimately reduce the unnecessary side effects and costs associated with the overtreatment of high-risk breast lesions.

The ACS Extramural Discovery Science program currently supports more than 700 research grants across the cancer continuum at more than 200 institutions. With an investment of more than five billion dollars since 1946, ACS has funded 50 researchers who have gone on to be awarded the Nobel Prize. ACS funds many 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.

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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 110 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](#), [X](#), and [Instagram](#).

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