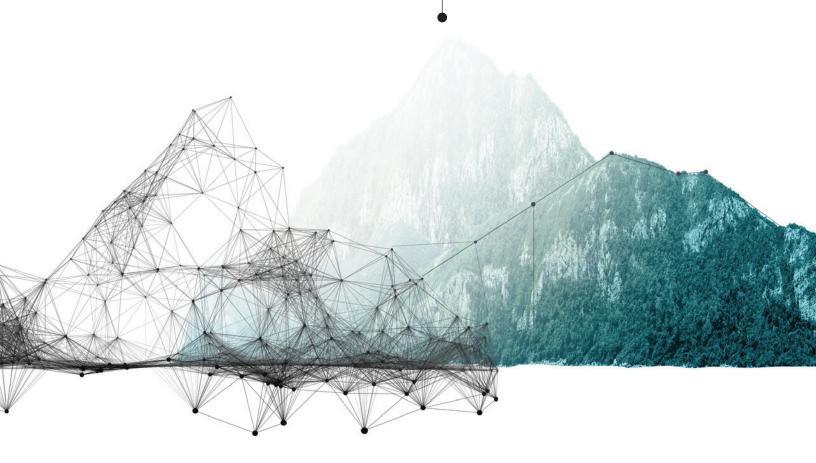
FROM INQUIRY TO IMPACT

Working Together to Advance Cancer Research



2023 OVERVIEW AND HIGHLIGHTS







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MESSAGE FROM THE DIRECTOR

This past year has been a momentous one for the Division of Cancer Control and Population Sciences (DCCPS). Not only did we celebrate the 50th anniversary of the Surveillance, Epidemiology, and End Results (SEER) Program—our nation's premier source for cancer statistics—we also made progress toward advancing the six

key future directions for research we had identified and unveiled in 2022: health equity, data strategies, evidence-based cancer control policy research, digital health interventions, modifiable risk factors, and climate change.

As we explained in the DCCPS 2022 Overview and Highlights, these areas are already facets of the research that we currently support, and we continue to fund the full spectrum of research within our domain. However, we and the cancer control community identified these six future directions as areas where immediate and intensified focus would significantly accelerate scientific progress and increase the impact of DCCPS-sponsored research. In this year's report, we provide brief summaries of progress that has been made in each of these six research areas, as well as some next steps and opportunities for further momentum.

Of course, 2023 has been notable also for the rollout of the National Cancer Plan, which provides a framework of action that is broad, farreaching, and impactful in delivering improved health outcomes for Americans. In this year's Overview and Highlights, we illustrate just some of the ways in which DCCPS-supported research is contributing toward achieving the eight goals of that ambitious plan.

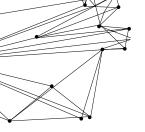
The National Cancer Plan is grounded in the premise that continued progress in the fight against cancer requires the multitude of talents and resources represented across the National Cancer Program. In that same spirit, we recognize and celebrate the multifaceted contributions of our funded research community and partners, who bring their diversity of perspectives, disciplines, and scientific approaches toward accomplishing our shared goal of reducing the consequences of cancer for all. As always, we hope this report will serve as a valuable resource for you in identifying areas of interest and collaboration.

Sincerely,

KATRINA A. B. GODDARD, PHD

Kat Gold

Director, Division of Cancer Control and Population Sciences National Cancer Institute



LEADERSHIP AT A GLANCE



OFFICE OF THE DIRECTOR

Dr. Katrina Goddard

DIRECTOR OF DIVISION OF CANCER
CONTROL AND POPULATION SCIENCES

4 RESEARCH PROGRAMS



EPIDEMIOLOGY AND GENOMICS RESEARCH PROGRAM Vacant ASSOCIATE DIRECTOR



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METHODS AND TECHNOLOGIES

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BRANCH CHIEF



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CLINICAL AND TRANSLATIONAL EPIDEMIOLOGY

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Dr. Jill Reedy
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SURVEILLANCE RESEARCH PROGRAM

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ASSOCIATE DIRECTOR



SURVEILLANCE RESEARCH PROGRAM

Dr. Kathleen Cronin
DEPUTY ASSOCIATE
DIRECTOR



SURVEILLANCE RESEARCH PROGRAM **Steve Friedman** SEER PROGRAM MANAGER



DATA QUALITY, ANALYSIS, AND INTERPRETATION **Dr. Serban Negoita** BRANCH CHIEF



SURVEILLANCE INFORMATICS **Dr. Elizabeth (Betsy) Hsu**BRANCH CHIEF



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STATISTICAL RESEARCH AND APPLICATIONS **Dr. Eric Feuer** BRANCH CHIEF



OFFICE OF THE DIRECTOR **Dr. Gary Ellison**DEPUTY DIRECTOR



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OFFICE OF THE DIRECTOR **Dr. Shobha Srinivasan**SENIOR ADVISOR FOR
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OFFICE OF CANCER SURVIVORSHIP

Dr. Emily Tonorezos

DIRECTOR



BEHAVIORAL RESEARCH PROGRAM **Dr. William Klein** ASSOCIATE DIRECTOR



BEHAVIORAL RESEARCH
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HEALTH BEHAVIORS RESEARCH **Dr. Susan Czajkowski**BRANCH CHIEF



HEALTH COMMUNICATION AND INFORMATICS RESEARCH

Dr. Robin Vanderpool
BRANCH CHIEF



TOBACCO CONTROL RESEARCH

Dr. Neal Freedman

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HEALTHCARE DELIVERY RESEARCH PROGRAM Vacant ASSOCIATE DIRECTOR



HEALTHCARE DELIVERY
RESEARCH PROGRAM

Dr. Janet de Moor
DEPUTY ASSOCIATE DIRECTOR



HEALTHCARE ASSESSMENT RESEARCH

Dr. Paul Doria-Rose BRANCH CHIEF

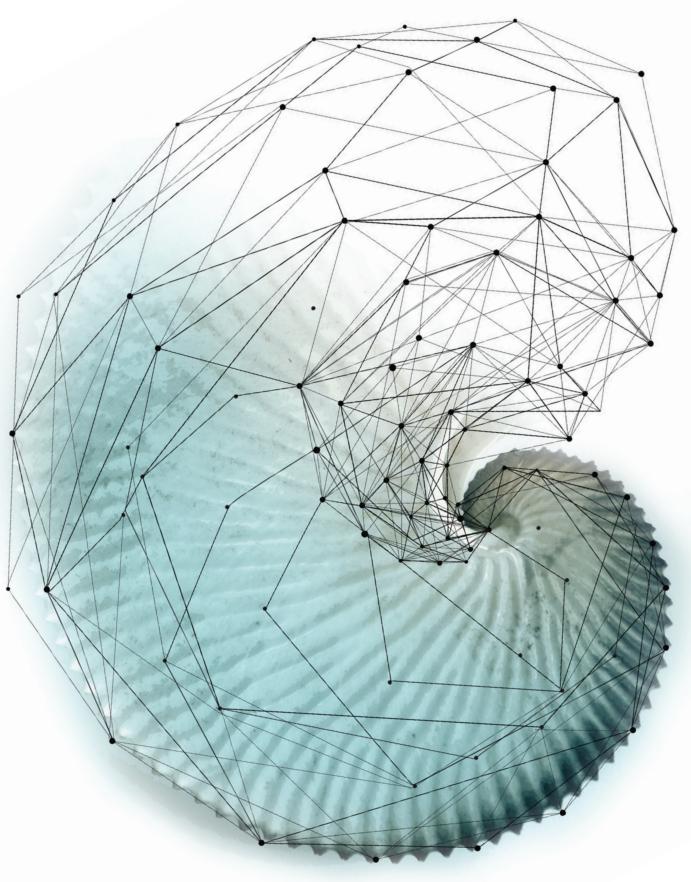


HEALTH SYSTEMS AND INTERVENTIONS RESEARCH **Dr. Sarah Kobrin**BRANCH CHIEF



OUTCOMES RESEARCH **Dr. Ashley Wilder Smith**BRANCH CHIEF





4.

FUTURE DIRECTIONS: PROGRESS AND OPPORTUNITIES

At the end of 2022, DCCPS announced six future directions to dramatically accelerate the impact of our research: health equity, data strategies, evidence-based cancer control policy research, digital health interventions, modifiable risk factors, and climate change. These six research areas—identified through input from our research community, both within and outside the National Institutes of Health (NIH)—augment rather than replace the broad spectrum of research we champion across the division.

In the past year since we announced these future directions, the division staff have been working purposefully to advance the science in each of these areas, in collaboration with the extramural cancer control community and colleagues across government.

Below, we highlight some selected examples of progress, as well as areas of opportunity for the future. DCCPS looks forward to collaborating with National Cancer Institute (NCI) scientists, federal partners, international groups, and professional and advocacy organizations to collectively increase our knowledge and impact in each of these critical areas.

"Data are critical in understanding place-based poverty and the resultant disparities among cancer survivors."



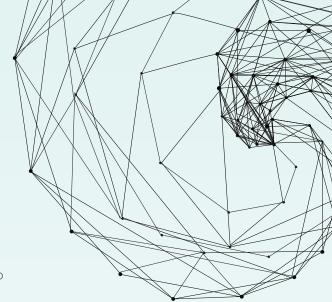


Collecting and Exploring New Data

Data from Texas (rural), Alaska (Alaska Native), and North Dakota (American Indian) on colonoscopies conducted by non-gastroenterologists (non-Gls)—such as general surgeons, physicians, or nurse practitioners—are being analyzed to inform whether future steps should be taken to encourage colonoscopies by non-GIs in rural areas and reservations. In a joint project with the US Department of Agriculture, persistent poverty census tracts were incorporated into SEER; these data, currently being analyzed, are critical in understanding placebased poverty and the resultant disparity among Blacks and Whites in cancer survival to develop appropriate multilevel interventions. To make American Indian and Alaska Native cancer data more easily accessible to the community and researchers, Roswell Park Comprehensive Cancer Center held the first of such discussions with researchers, tribal community members, the Indian Health Service, and NCI to assess the challenges and opportunities; this discussion will be followed up with a workshop for wider audiences and the Tribal Epidemiology Centers to collect more regional data where the populations are not included in the larger data sets.

Cancer Epidemiology Cohorts

DCCPS is leading two initiatives to diversify NCI's portfolio of cancer epidemiology cohorts. With a focus toward the future, DCCPS is soliciting applications via <u>PAR-22-161</u> to support next-generation cancer epidemiology cohorts to address scientific and resource gaps and encourage representation of understudied populations in cohorts. The second initiative provides funding for several new Cohorts for Environmental Exposures and Cancer Risks (https://ceecr.org). With collaboration from the National



Institute of Environmental Health Sciences, this initiative aims to address gaps in knowledge and build upon emerging findings related to environmental exposures and lifestyle, behavioral, genomic, or other factors that modify the impact of exposures on cancer risk by establishing new cohorts, especially in understudied and underserved populations. The resulting five new prospective cohorts are recruiting diverse study populations representative of various regions throughout the United States.

Centers for Cancer Control Research in Persistent Poverty Areas

DCCPS is awarding \$50 million over 5 years to support five new Centers for Cancer Control Research in Persistent Poverty Areas as part of the Persistent Poverty Initiative (RFA-CA-22-015). The initiative aims to reduce cancer morbidity and mortality among low-income populations living in persistent poverty census tracts by conducting research studies, developing partnerships, implementing sustainable interventions with local communities, and enhancing the professional development of a cadre of early-career researchers who are well-versed in conducting cancer control and population research in underserved communities.

Advancing Cancer Control Equity Research through Transformative Solutions

DCCPS is launching the Advancing Cancer Control Equity Research through Transformative Solutions initiative, aiming to address the impact of social determinants of health (SDOH) on adverse cancer control outcomes. The initiative will fund up to four research centers and one coordinating center to develop interventions, measures, and methods that target SDOH, support community engagement, and advance cancer control equity. The earliest start date for the centers is July 2024. The goal is to promote health equity by implementing interventions that effectively tackle the multilevel pathways through which SDOH influence adverse cancer outcomes.

"The goal is to promote health equity by implementing interventions that effectively tackle the multilevel pathways through which social determinants of health (SDOH) influence adverse cancer outcomes."

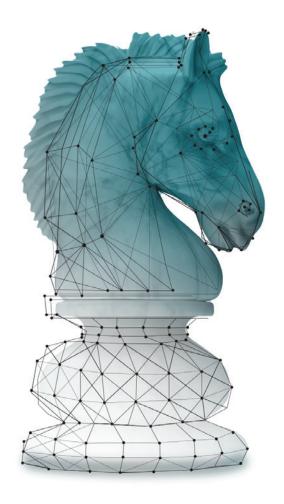
"We must increase our understanding of the role of social determinants of health in cancer control and population sciences."

Improving Care and Outcomes for Cancer Survivors from Sexual and Gender Minority Populations

This initiative addresses a critical need for improved care delivery and outcomes for sexual and gender minority (SGM) cancer survivors, an underserved and understudied population at higher risk of poor health outcomes. The initiative will fund observational and intervention research to understand and address drivers of disparities and to support development, testing, and scaling of innovative, feasible, and effective interventions to address barriers experienced by SGM cancer survivors for cancer care and improved overall health.

Planning for the Future

Looking ahead, we must increase our understanding of the role of SDOH in cancer control and population sciences. Related to the Data Strategies area, an important step would be incorporating SDOH in cancer registries through linkages and encouraging studies, especially cohorts, to link to other data sets or to collect relevant data. Another key step would be the incorporation of sexual orientation and gender identity (SOGI) measures in cancer registries and cohorts to better understand the disparities related to cancer risk and poorer outcomes experienced by SGM populations, as well as to inform the development of interventions to address those disparities. Likewise, environmental justice (e.g., air and water pollution, exposures to known and/or suspect toxins, inadequate access to healthy food and green space, and inadequate transportation) and its intersection with cancer is another area of tremendous research opportunity that aligns with the Health Equity priority area in the division.





SEER Linkages with External Data Sources

Linking the data in the central cancer registries that are part of the SEER Program with external data sources can help to fill gaps around understanding treatment patterns and other factors that may impact cancer outcomes to better characterize patient trajectories and real-world patterns of care and outcomes. Through linkages with external data sources, information regarding genomic testing, treatment information from pharmacy and insurance claims, Medicare encounter data, housing data from the US Department of Housing and Urban Development, and area-level SDOH measures will be available within SEER or as specialized data sets.

Recently, the Department of Veterans Affairs (VA) and NCI signed a landmark memorandum of understanding that will operationalize the bidirectional exchange of cancer registry information between the VA and SEER, resulting in the largest ever collection of veteran cancer data. This strategic exchange and curation of our nation's cancer registry data will leverage the strengths of both agencies and create new opportunities for the research community to support all patients facing a cancer diagnosis.

Enhancing Population Science Data Infrastructure

Hand-in-hand with enhancing collection of data to support cancer control and population sciences research is making sure that data are FAIR (findable, accessible, interoperable, and reusable). A key component in promoting FAIR data is ensuring accessibility of that data for broader research use through improved infrastructure, particularly infrastructure that is interoperable with other NCI data resources, such as the Cancer Research Data Commons (CRDC). DCCPS has been spearheading a new population science data commons as part of the CRDC, which will initially support sharing of data from our cohort studies. Working with the existing CRDC framework not only reduced the time for development of a population data science commons but also increases the ability to connect with other NCI data available through the CRDC, enriching the potential research questions that could be addressed. Similarly, the National Childhood Cancer Registry (NCCR) data platform, a cloud-based discovery, data access, and analytic platform, is being designed to be interoperable with the other Childhood Cancer Data Initiative resources.

Encouraging Reuse of DCCPS-Supported Data

DCCPS's goals in enhancing our approach to data strategy include both supporting the data and infrastructure needs of the research community and optimizing secondary use of DCCPS data and resources. That optimization requires not only the infrastructure pieces outlined above to improve findability and accessibility of data but also encouraging reuse of the data. To do this, DCCPS has developed several initiatives, including PAR-23-254: Secondary Analysis and Integration of Existing Data to Elucidate Cancer Risk and Related Outcomes. This PAR signals to the research community the value that DCCPS places in leveraging existing data for innovative data modeling and analysis to answer new research questions and advance cancer control research. The division has also led NCI participation in several additional trans-NIH funding opportunity announcements aimed at enhancing the secondary use of data, for example, <u>RFA-PM-23-001</u>, Enhancing the Use of the All of Us Research Program's Data (R21), and RFA-PM-23-002, which supported Small Grants to Enhance the Use of the All of Us Research Program's Data (R03).





"Leveraging partnerships will be critical for moving DCCPS's data strategies forward, particularly for addressing gaps in infrastructure."

Data Help to Drive DCCPS Scientific Priorities

Data Strategies is a crosscutting area, fundamental to all of DCCPS's scientific priority areas. These scientific priority areas will help to define and prioritize the opportunity areas to pursue in filling data and infrastructure gaps. For example, the Climate Change Scientific priority area highlights progress in exploring external environmental data sources to link with SEER and the need to better understand what data sources exist for self-reported experiences with climate and the environment.

The Modifiable Risk Factors scientific priority area highlights the need for the collection and integration of data across behaviors and timespans to better understand the impact on health outcomes, illustrating a gap area in data and data science methods. The progress described in the Health Equity scientific priority area of the cancer epidemiology cohorts, the Persistent Poverty initiative, and Sexual and Gender Minority Population initiatives helps to fill critical data gaps to ensure all populations are served by DCCPS research.



The Evidence-based Cancer Control Policy Research scientific priority area is also data-driven and will identify data needs in order to enable evidence-based policymaking, and evaluate the impact of various policies (such as tobacco control strategies) and their implementation on healthrelated outcomes. Finally, the Digital Health scientific priority area highlights additional data strategy needs, for example related to the use of telehealth approaches for cancer care or to better understand the effects of digital health tools and interventions on patientprovider communication.

Planning for the Future

Leveraging partnerships will be critical for moving DCCPS's data strategies forward, particularly for addressing gaps in infrastructure. For example, nascent collaborations with the National Center for Advancing Translational Sciences (NCATS) to adapt the resources it has already developed for the National **COVID Cohort Collaborative** (N3C) are an important opportunity area to not only address data gaps with additional information from electronic medical records but also to leverage existing tools for data harmonization and research access in a secure manner. Finally, a complement to encouraging research that utilizes existing data is establishment of an annual award to honor those investigators who demonstrate exemplary practices in data sharing.



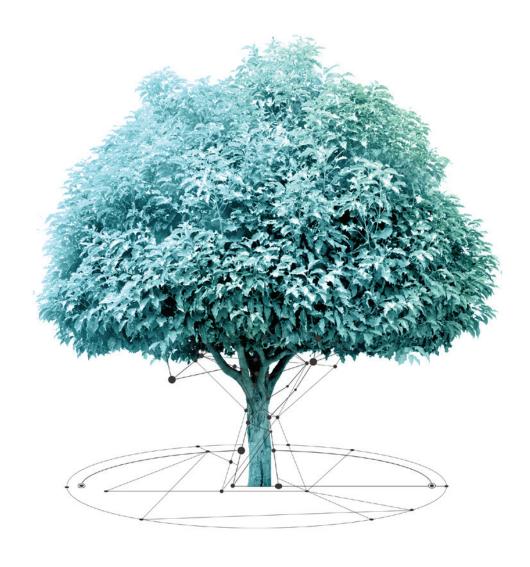
Tobacco Control Strategies Reduce Cancer Mortality Rates

The Tobacco Control Research Branch (TCRB) leads and collaborates on research and disseminates evidence-based findings to prevent, treat, and control tobacco use in order to create a world free of tobacco use, related cancer, and suffering. NCI has published funding opportunities focused on tobacco control policies, with the long-term goal of reducing disparities in tobacco-related cancers, and, in doing so, promoting health equity. Under these funding opportunities, DCCPS has funded 13 awards (three R21s, eight R01s, and two R37s). Beyond these activities, NCI continues to participate in the partnership between NIH and the Food and Drug Administration's Center for Tobacco Products to fund research to inform tobacco regulatory activities. TCRB also funds other grants focused on state and local tobacco control policy research. This funded research will advance tobacco control policies in the United States to impact cancer morbidity and mortality. DCCPS has also been actively engaged with the US Department of Health and Human Services (HHS) and the White House in Cancer MoonshotSM efforts, including, for example, involvement in the White House Cancer Moonshot Smoking Cessation Forum held on June 7, 2023.

Reconvening the HPV Cancer Center Consortium

In response to the 2012–2013 President's Cancer Panel report "Accelerating HPV Vaccination Uptake: Urgency for Action to Prevent Cancer," DCCPS funded three rounds of grant supplements to NCI-Designated Cancer Centers to support the development of expertise related to increasing HPV vaccine uptake. As a result of these supplements, NCI-Designated Cancer Centers formed the HPV Cancer Center Consortium, which focused on increasing HPV vaccine uptake and highlighting local issues around HPV vaccination.

"DCCPS has also been actively engaged with the US Department of Health and Human Services (HHS) and the White House in Cancer MoonshotSM efforts."



Consortium efforts helped boost the two-dose completion rate for the HPV vaccine from only 28% (girls only) in 2012 to its current level of 54%, including boys and girls. Following a COVID-19 pandemic-related hiatus, the HPV Cancer Center Consortium reconvened and is planning a 2-day, in-person event hosted by the University of Kentucky, where cancer centers, researchers, and practitioners will reconnect in a collaborative environment to discuss the increasing uptake of the HPV vaccine, reducing HPV-related cancers, and highlighting local issues surrounding HPV vaccination. A webinar series launched in September 2023 as part of the consortium's efforts to support the goal of providing the vaccine to 80% of eligible adolescents and coming closer to eliminating death from cervical cancer.



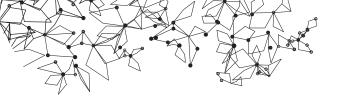


CCIS Action Group and Awards

The Consortium for Cancer Implementation Science (CCIS) was founded in 2019 as a public effort in which Cancer Moonshot investigators, as well as other researchers and practitioners, work together to address key challenges and advance the implementation science (IS) agenda in cancer. The Policy and IS action group has seven subgroups and supports the IS community by (1) analyzing and advancing policies related to cancer prevention and control, (2) identifying resources to support IS policy development and implementation, and (3) connecting investigators working in this space. During the 2022 CCIS annual meeting, the Policy and IS action group prioritized equity, capacity, and funding as well as devising a shared language for use with policymakers. To accomplish these priorities, the action group set out to

- Use an equity-focused approach to policy implementation and analysis
- Create an online platform for training
- Develop a best practices document

Supplemented by the <u>CCIS awards program</u>, which awards personal service contracts to individuals willing to dedicate time to develop and deliver specific tools and resources prioritized by the action groups, <u>seven policy public goods</u> have been developed to move the action group priorities forward. The action group reconvened in October 2023 to identify priorities for fiscal year 2024 and continues to move policy-related IS priorities forward.



Administrative Supplement to Support Health Policy Research in Cancer Prevention and Control

In early 2023, DCCPS solicited applications via <u>NOT-CA-23-044</u> encouraging currently funded NCI extramural investigators to apply for administrative supplements to support cancer-related policy research to

- Generate new or utilize secondary data that operationalize policies hypothesized to affect cancer control at the geographic, provider, patient, and/or temporal level
- Examine the effects of existing policies and/or simulate the potential effects of new policies, with an emphasis on understanding health disparities by examining differential impacts on disadvantaged groups
- Identify effective community-engaged strategies for dissemination or implementation of evidence to inform policymaking

The administrative supplement yielded a robust response, resulting in nine funded projects. The funded projects focus on (1) incorporating the effects of economic policy and price shocks on treatment, spending, and survival outcomes for multiple myeloma; (2) evaluating the dissemination of state legislation to providers and patients by payors; (3) examining whether implementation of the national policy for next-generation sequencing testing for patients with advanced or metastatic cancer influenced disparities in the use of genomically targeted therapies; (4) exploring the impact of mergers between health insurers/plans and pharmacy chains on the quality of oncology care; (5) studying the implementation of expanding genetic risk assessment, per the



"We will focus on evaluating existing policies and studying new policy approaches to improve cancer outcomes and health equity."

National Comprehensive Cancer Network guidelines, among Black and rural individuals; (6) exploring organizational-level policymaking for hospital community benefits to inform development of a simulation tool that can be used for more equitable policymaking; (7) studying payment reform for delivery of radiotherapy and implications for disparities; (8) understanding how state immunization information systems policies and features can quide providers' HPV vaccine recommendations; and (9) studying the effects of Medicare coverage for telehealth on cancerrelated care.

Obesity, Diet, Physical Activity, and Cancer

Obesity and its proximal determinants, diet and physical activity, together constitute the second most important modifiable risk factor for cancer, after

smoking. DCCPS has invested significantly in supporting policy-related research and efforts in these areas. NCI has funded a substantial body of grants addressing policy influences on obesity via Notice of Special Interest (NOSI): Obesity Policy Evaluation Research (NOT-DK-20-035) and the innovative Time-Sensitive Obesity and Policy Evaluation (PAR-21-305) led by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). NCI is also part of a broader time-sensitive Notice of Funding Opportunity (NOFO) (PAR-22-233) led by the NIH Office of Behavioral and Social Sciences Research (OBSSR), with significant NCI staff contributions that support policy evaluation on a range of factors influencing outcomes across the cancer continuum. In addition, NCI has collaborated on NOSI: Stimulating Research to Understand and Address Hunger, Food and Nutrition

(NOT-OD-22-135) support research addressing food and nutrition insecurity, including the contextual examination of policy interventions at organizational through federal levels to support healthy food environments and promote cancer prevention and control. Critical examples of other recent, ongoing efforts by DCCPS staff include leadership of the National Collaborative on Childhood Obesity Research (NCCOR), recently updating and promoting data and policy evaluation-related resources such as the NCCOR Catalogue of Surveillance Systems, Measures Registry, and a toolkit to help communities create thriving and active communities; development of the Classification of Laws Associated with School Students (CLASS) resource; supporting the Dietary Guidelines for Americans, including participating on the Data Analysis Team; serving

on the federal committee and writing team for the Physical Activity Guidelines for Americans Midcourse Report on Implementation Strategies for Older Adults; hosting the 2023 Active Living Conference, highlighting research, policies, and practices based on a multilevel perspective; and the publication of several papers addressing policies related to physical activity from <u>elementary school</u> to <u>college</u> settings. Efforts to normalize community and multilevel research, policy evaluation, and stakeholder engagement are vital to fulfilling the promise of cancer prevention via a life course approach that addresses critical modifiable risk factors.

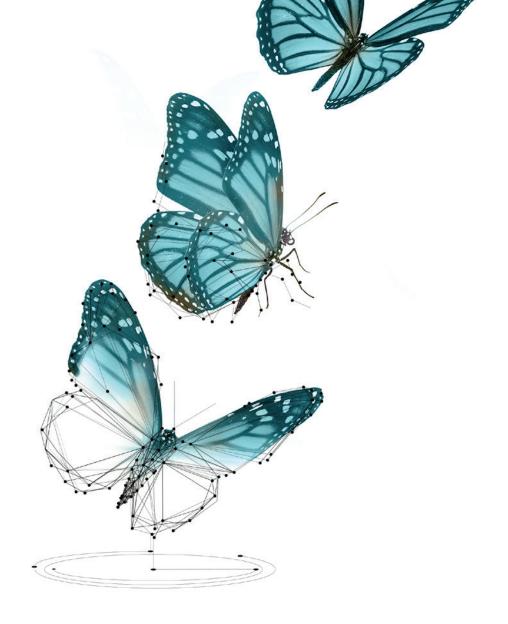
Planning for the Future

DCCPS has a <u>long history</u> of supporting science that informs policies and programs to prevent, detect, and treat cancer and improve outcomes for cancer survivors. As we

look toward the future. we recognize the central role that policy plays in shaping health and health care. DCCPS is committed to sustaining the innovations and interventions that come from research. While our work has a broad influence on policy, we will focus on evaluating existing policies and studying new policy approaches to improve cancer outcomes and health equity. By identifying methodological approaches for studying different policy types and levels and focusing on structural issues affecting health equity, policy research can move the field forward to determine the impact of those policies and inform existing frameworks and strategies to promote population health.

For information about **alcohol and cancer**, please see the Modifiable Risk Factors section. Information about **telehealth** can be found in the Digital Health section.







Establishing Cancer-focused Telehealth Research Centers of Excellence

In the United States, there has been a substantial increase in telehealth use in recent years. Research has shown that telehealth can improve healthcare access and quality, patient-provider communication, and health outcomes. Importantly, many aspects of cancer care can be delivered through telehealth, such as the promotion of positive health behaviors and cancer screening, remote patient monitoring and management of symptoms during cancer treatment, and virtual survivorship follow-up care. In response, DCCPS, supported by the Cancer Moonshot, launched the Telehealth Research Centers of Excellence (TRACE) initiative to ensure cutting-edge findings are quickly adopted into effective and equitable practice.

Over the next 5 years, four centers will focus on improving people's lives by

- Rapidly developing an evidence base of telehealth approaches to cancer care, spanning prevention to survivorship
- Identifying and addressing disparities in access to and use of telehealth services for cancer-related care
- Fostering innovations to improve cancer care delivery using new tools, research methods, and technologies
- Evaluating the changing policy, payment, and communication environments and their impact on the delivery of telehealth for cancer care

Digital Health as a Solution for Patient-Provider Communication

DCCPS continues to diversify the digital health funding landscape through the use of different NCI funding mechanisms. In spring 2023, DCCPS solicited administrative supplements via NOT-CA-23-041 to better understand the effects of digital health tools and interventions on patient-provider communication across the cancer control continuum, with the aim of developing an evidence base to inform future development, modification, and delivery of digital tools/intervention for effective cancer prevention and control. The NOSI received a robust response, with 12 funded projects focused on leveraging diverse digital tools and interventions, including remote symptom monitoring, electronic medical records, mobile applications, and artificial intelligence (AI) to improve patient-provider communication in areas such as cancer survivorship and lung cancer screening.

Exploring Emerging Technology with Government-wide Support

DCCPS is partnering within NCI and across NIH and the federal government to contribute to more than 15 funding opportunities focused on digital health and evolving technologies. For example, as a partner in the NIH-National Science Foundation (NSF) Smart Health initiative, DCCPS aims to accelerate the development and use of innovative approaches that partner technology and data science-based solutions with biomedical and behavioral health research. The program supports high-risk, high-reward research focused on improving fundamental understanding of biomedical and behavioral health-related processes across a variety of areas, including information science, data science, technology, health disparities, behavior, sensors, imaging, and engineering. DCCPS is also currently soliciting applications via NOT-CA-22-037 to validate digital health tools and AI technologies that are currently or have the potential to be adopted and implemented in real-world settings across the cancer control continuum.

Leveraging Collaboration to Move the Digital Health Needle

Digital health innovation requires collaboration throughout the government. DCCPS program staff lead and participate in the <u>Digital Health R&D Interagency</u>

Working Group, which aims to improve the health of Americans by advancing digital health technologies that support personalized health screening, monitoring, diagnosis, and treatment.

Additionally, DCCPS staff collaborated with the Office of the National Coordinator for Health Information Technology (ONC) to contribute subject matter expertise to the <u>United States</u> Core Data for Interoperability Version 4 (USCDI v4), published in July 2023, which included physical activity data elements as Core Measures (see page 16), alongside other new data elements that focus on improving equity across the healthcare ecosystem. Finally, DCCPS Program staff also lead and participate in the NIH Telehealth Interest Group, a collective of institutes and centers dedicated to promoting telehealth research and practice across NIH.

Boosting Innovation in the Fight Against Cancer

Announced by the Cancer MoonshotSM in February 2023, <u>CancerX</u> is a public-private partnership to boost innovation in the fight against cancer. With a mission to identify, support, grow, and implement world-class digital solutions to reduce the burden of cancer for all people, CancerX aligns with the goals set forth in the <u>National Cancer Plan</u> and DCCPS's mission

The inaugural project is developing evidence, best practices, and a toolkit focused on improving equity and reducing financial toxicity in cancer care and research through digital health technologies. Building on this work, CancerX will be launching a demonstration project in 2024 that will combine the implementation and evaluation of a digitally enabled cancer care model with the development of an associated alternative payment model to combine clinical decision support, virtual-first care, and navigation programs at scale to improve patient access and reduce financial toxicity. DCCPS staff represent NCI as inaugural members on this groundbreaking initiative

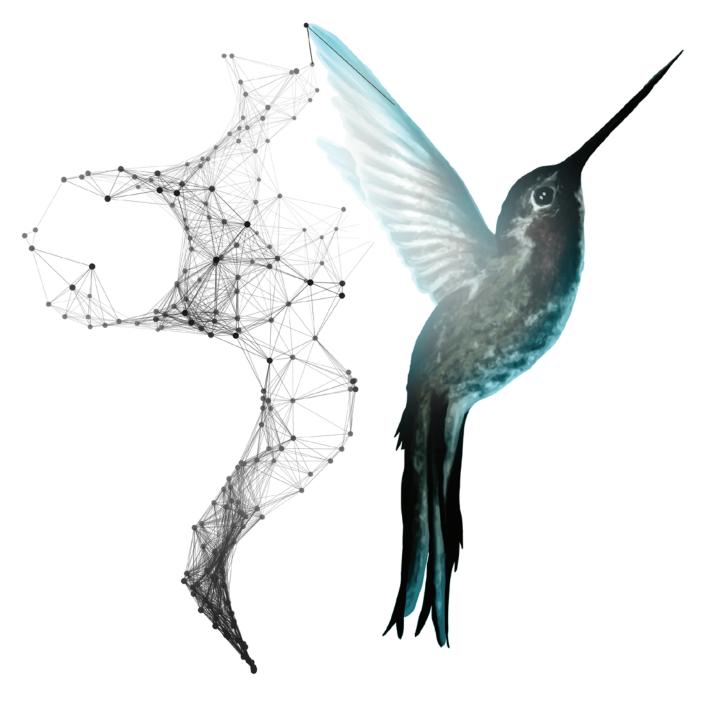
to champion high-quality innovation in cancer care, address methodological gaps where they exist, and define best practices for successful and equitable implementation.

Planning for the Future

Digital health plays a pivotal role in the future of cancer control research, enabling integration, analysis, and interpretation of patient data. As we think toward the future, it is important to understand how digital health approaches can advance the assessment, monitoring, and understanding of multilevel cancer risk factors and determinants: increase participant reach and engagement in clinical, behavioral, and epidemiological cancer research; and improve the delivery of cancer-related care.

In addition to identifying and addressing multilevel barriers to equitable access to, engagement with, and use of digital health technologies across constituent groups and cancer-related settings, we must also address the need for training and workforce development to foster the dissemination and adoption of digital health research and technology in cancer control.







Population Approaches to Reducing Alcohol-related Cancer Risk

Alcohol is a well-established human carcinogen; its consumption is associated with both increased cancer risk and cancer recurrence. To address this cancer-related risk factor, DCCPS released a NOFO titled Population Approaches to Reducing Alcohol-related Cancer Risk (PAR-23-244). The NOFO funds multilevel research with two distinct goals: (1) to disseminate effective messaging to increase knowledge and awareness of the risk of cancer attributable to alcohol use, and (2) to identify intervention and policy approaches that influence alcohol-related social norms and reduce consumption. The ultimate goal is to improve the evidence base for population and policy approaches to cancer control addressing alcohol, focusing on populations experiencing disparities, ultimately resulting in a shift to lower levels of alcohol consumption at the population level to reduce cancer risk.

This NOFO also is an example of progress in the area of Evidence-based Cancer Control Policy Research. The funding opportunity, with the first application due February 5, 2024, builds upon proven tobacco-related policies and demonstrates DCCPS's commitment to reducing alcohol-related cancer risk. DCCPS staff contributed to the review (with the Centers for Disease Control and Prevention, Office of the Surgeon General, and the Substance Abuse and Mental Health Services Administration) of a petition to Congress calling for changes to alcohol labeling and the addition of cancer-related health warnings to alcohol-containing beverage containers. Future opportunities revolve around research gaps in connecting cancer prevention and control to alcohol policy and evaluating whether increasing knowledge and attention to this issue can reduce the burden of alcohol-related cancer.

Advancing Methods for Integrated Analysis of 24-hour Behavioral Patterns: The Role of Diet, Physical Activity, and Sleep

Diet, physical activity/sedentary behavior, and sleep are modifiable risk factors that play a role in the etiology and prevention of many chronic diseases, including overweight/obesity, diabetes, cardiometabolic diseases, and cancer. Many NIH-supported studies have collected data on these behaviors in relation to a variety of health outcomes. It is becoming clear that the timing of these behaviors, relative to the 24-hour day and each other, is critical for understanding their health effects. Yet, we have a limited understanding of how the interactions of these modifiable risk factors across the day impact health, especially in diverse populations.



Building on the <u>Biden-Harris</u> <u>Administration National</u> <u>Strategy on Hunger, Nutrition, and Health, DCCPS efforts are underway to support using data science approaches to integrate these behaviors across the 24-hour day and examine their relationship with health outcomes.</u>

Food is Medicine Research Opportunities

Better integration of nutrition into health, especially in populations that have historically experienced health inequities and disparities related to food and nutrition, is another key component of the Biden-Harris Administration National Strategy on Hunger, Nutrition, and Health. The <u>Food is Medicine</u> research programs are part of a wholeof-government approach, including work with the Cancer Moonshot Prevention and Screening Task Force to end hunger, improve nutrition and physical activity, reduce diet-related diseases and disparities, and decrease the impact of preventable cancers. DCCPS scientists' leadership and engagement in the Food is Medicine initiative aims to promote meaningful improvements in food security, health biomarkers (e.g., body mass index and hemoglobin

A1C), cost of care, and health quality indicators (e.g., same diagnosis). The goal is to address inequities in based on race, ethnicity, poverty, and other SDOH by building sustainable clinicalcommunity partnerships that can reinforce and act as an effective bridge between healthcare systems and patients to improve an individual's dietary and lifestyle behaviors. Through the Request for Information (RFI): Food is Medicine Research Opportunities (<u>NOT-OD-23-107</u>), NCI and other federal departments and agencies have opportunities that will optimize, implement, and disseminate information on regionally and culturally appropriate – as well as linguistically sensitive – Food is Medicine activities. This information will be used by the federal government, including NCI, for research planning and strategies for implementing Food is Medicine activities.

Advancing Systems Epidemiology to Address Modifiable Cancer Risk Factors

Systems epidemiology offers a comprehensive and holistic

approach to studies of cancer and cancer-related risk factors in populations.

Systems epidemiology considers various features from multiple domains (e.g., environment, genetics, sociodemographic, and clinical), assesses the interrelationships among risk factors, considers changes how these changes ultimately affect cancer risk and outcomes over the life course. This approach offers a framework to account for the complexity of cancer and cancer risk factors. contributing to a broader understanding of the disease and its determinants. In 2023, DCCPS coordinated a collection of seven papers that described investments in systems epidemiology, identified gaps in the cancer systems epidemiology portfolio, and highlighted the need to encourage more cancer systems epidemiology systems modeling across the life course was recommended, which will explore how cancer-related modifiable risk factors change over the life course for different birth cohorts, ultimately leading to an understanding of the impact of interventions to change risk factor trajectories and identification of the





downstream implications of risk factor interventions on cancer incidence and mortality.

Community-engaged Initiatives for Obesity Policy: Lessons Learned for Healthy Childhood Growth

Obesity is secondary only to tobacco use as an important modifiable risk factor for cancer. Reducing the prevalence of childhood obesity is a critical step in addressing obesity and its relationship to cancer in later life. Addressing obesity in children will require multilevel efforts involving the engagement of a wide range of public and private sector partners to collaborate on bold systemic solutions that address structural racism, poverty, food insecurity, and other challenges. Through the National Collaborative on Childhood Obesity Research, DCCPS is working with federal partners and other experts to develop three think tanks to discuss international, national, and local public health policy efforts to inform the next steps in childhood obesity research and practice. In these meetings, researchers and practitioners will discuss lessons learned from tobacco, alcohol, sugar-sweetened beverages, food package labeling, and other public

health policy efforts to inform community-engaged initiatives for obesity policy. The workshops will build on earlier collaborative activities related to public health policy research and practice, such as the Healthy Community Study; Snap-Ed Toolkit; Time-Sensitive Obesity Policy Research Initiatives; Creating Thriving, Activity-Friendly Communities Toolkit; and Lessons Learned from Global Efforts: Childhood Obesity. Ultimately, DCCPS envisions a broad-based initiative focused on implementing and evaluating interventions that target multiple influences on childhood obesity, from the individual and family to community levels, focusing on policy and stakeholder engagement to address obesity and related cancer risk factors.

Planning for the Future

Up to 50% of cancers are attributable to modifiable risk factors such as tobacco use, physical inactivity, poor diet, alcohol use, poor sleep hygiene, and low adherence rates to medical regimens such as recommended cancer screenings. Effectively addressing these risk factors and ultimately reducing cancer risk will require recognition of the multiple levels of influence on

cancer risk and the need for interventions that integrate individual, family, community, environmental, healthcare practitioner, and policy approaches, as well as efforts that focus on populations experiencing disparities and inequities in cancer risk and outcomes. Increasing the use of evidence-based interventions in communities and healthcare settings, given multiple co-occurring behaviors, can translate to better outcomes for all populations. Future opportunities also include investigating the effects of policies and populationlevel approaches targeting modifiable cancer risk factors, and implementing and evaluating multilevel interventions to modify cancer risk behaviors and reduce cancer risk. Efforts to better understand how cancer risk factors relate to each other and the risk of various cancers across the lifespan will further inform efforts to target and modify these behaviors more precisely, ultimately favorably altering cancer risk and outcomes.



27.



- Long-Term Effects of Disasters on Health Care Systems Serving Health Disparity Populations (R01- Clinical Trial Optional) (PA-20-172)
- Impacts of Climate
 Change Across the Cancer
 Control Continuum (R01
 Clinical Trial Optional)
 (PAR-23-153)
- Research Coordinating
 Center to Support Climate
 Change and Health
 Community of Practice
 (U24 Clinical Trial Not
 Allowed) (RFA-ES-22-003)
- Notice of Special Interest (NOSI): Climate Change and Health (NOT-ES-22-006)
- Notice of Special Interest (NOSI): Climate Change and Health Administrative Supplements (NOT-HD-23-006)
- Exploratory Grants for Climate Change and Health Research Center Development (P20 Clinical Trial Optional) (RFA-ES-23-007)

Collecting and Exploring New Data Linkages

Understanding the associations between the environment, climate change, and cancer requires strong data sources and the ability to link relevant environmental data sets to cancer outcomes and cancer-related health behaviors. The

DCCPS Surveillance Research Program has conducted a landscape analysis of environmental data sets that can be linked to SEER data to advance research in both cancer etiology and cancer survivorship. In the Behavioral Research Program, the Health Information National Trends Survey® (HINTS) added an item on climate change harm perceptions and will field additional items regarding climate and the environment in the next HINTS iteration. To understand what data sources exist for self-reported experiences with climate and the environment. including natural disasters and environmental exposures, a landscape analysis is being conducted to capture whether and what types of items are measured in existing federal surveys.

Collaboration and Outreach

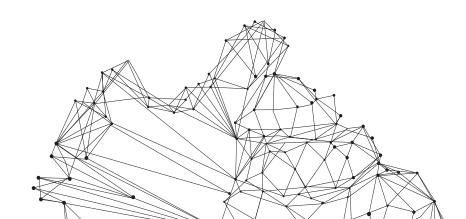
DCCPS participates in the NIH-wide Climate Change and Health Working Group, the National Institute of Environmental Health Sciences/NCI Cancer and the Environment Working Group, the Intra-NIH Disaster Interest Group, and the federal government-wide Interagency Crosscutting Group on Climate Change and Human Health. DCCPS also hosted one of the eight scholars selected for the inaugural cohort of

NIH Climate and Health Scholars, who is helping the division identify priorities in climate change and cancer. To stimulate scientific discussion. raise awareness about NCI's interests in climate change and cancer, and highlight NCI-supported research. several webinars have been conducted, including the Healthcare Delivery Research Program-led series "Disasters & Cancer Care Delivery Science." DCCPS has also organized several panels on climate change and cancer at national meetings, including at the American Society of Preventive Oncology conferences in 2022 and 2023, the 2022 Annual Conference on the Science of Dissemination and Implementation in Health, and the 2023 Society of Behavioral Medicine (SBM) Annual Meeting. DCCPS also participates in special interest groups (SIG) developed by professional societies. including the SBM's Climate Change and Health SIG and the American Psychosomatic Society's Climate Change, Sustainability, and Health SIG. The Cognitive, Affective, and Social Processes in Health Research (CASPHR) group also hosted an internal meeting on climate change and cancer.

Planning for the Future

Health threats from climate change and climate-related extreme weather events are increasing in frequency and intensity, and climate change disproportionately affects NIH-designated health disparities populations. DCCPS aims to address these issues by building a portfolio of climate and cancer research, increasing research expertise across the population sciences to strengthen the field of climate impacts on cancer, and contributing to an actionable evidence base useful for informing public health practice, policy, and care delivery. Future plans include identifying and addressing new exposures, including the effects of wildfires, flooding, and extreme heat, by expanding measures and methods development to enable more precise, accurate measurement and modeling of cumulative exposures of climate change on cancer risk, health behaviors, and outcomes.

A key priority is to support research that promotes health equity, including identifying and addressing cumulative exposures and disruptions to cancer prevention and cancer treatment services in environmental justice communities to prevent exposures, ameliorate harmful effects among those exposed, develop plans to enhance care delivery in the face of climate change effects, and improve cancer survivor outcomes. Understanding the impacts of climate change across the cancer control continuum is key to developing and implementing interventions to mitigate or reduce harmful consequences at the population level.



ENDING CANCER AS WE KNOW IT

DCCPS IMPACT ON PREVENTION, DIAGNOSIS, TREATMENT, AND ACCESS TO CARE

DCCPS is committed to advancing research to eliminate cancer and its consequences for all while also achieving the goals outlined in the National Cancer Plan.

The National Cancer Plan centers on eight goals:



PREVENT CANCER



DELIVER OPTIMAL CARE



DETECT CANCERS EARLY



ENGAGE EVERY PERSON



DEVELOP EFFECTIVE TREATMENTS



MAXIMIZE DATA UTILITY



ELIMINATE INEQUITIES



OPTIMIZE THE WORKFORCE



In addition to encouraging scientific ideas for researchers through investigator-initiated applications and omnibus solicitations, DCCPS develops and participates in NIH funding opportunities aimed at stimulating new directions in specific research to examine, discover, and test methodologies to improve public health. The following are examples of recent funding opportunity announcements to encourage research projects in emerging or priority areas and to support the next generation of cancer researchers.

From DCCPS

- Exploratory Grants in Cancer Control (PAR-21-341)
- Modular R01s in Cancer Control and Population Sciences (PAR-21-190)
- Cancer Epidemiology Cohorts: Building the Next Generation of Research Cohorts (PAR-22-161)
- Research Opportunities in Established Cancer Epidemiology Cohort Studies (PAR-22-162)
- Impacts of Climate Change Across the Cancer Control Continuum (R01 Clinical Trial Optional) (PAR-23-152, PAR-23-153)
- Understanding Expectancies in Cancer Symptom Management (R01 Clinical Trial Required) (PAR-23-273)
- Population Approaches to Reducing Alcohol-related Cancer Risk (R01 Clinical Trial Optional) (PAR-23-244)
- Improving Care and Outcomes for Cancer Survivors from Sexual and Gender Minority (SGM) Populations (R01 Clinical Trial Optional) (PAR-23-292)
- Disparities Affecting Healthcare Utilization and Health Outcomes Among Childhood Cancer Survivors (NOT-CA-22-029)
- Addressing Cancer-related Financial Hardship to Improve Patient Outcomes (NOT-CA-22-045)
- Pragmatic Trials Across the Cancer Control Continuum (UG3/UH3 Clinical Trial Required) (PAR-22-256)
- Dissemination and Implementation Research in Health (Domestic and International Funding Opportunity) (PAR-22-105, PAR-22-106, PAR-22-109).

From NCI

- <u>Early Investigator Advancement Program</u> (<u>EIAP</u>)
- NCI Opportunities for Early-Stage Investigators
- Research Specialist Award (R50)
- National Cancer Institute Program
 Project Applications for the Years 2023,
 2024, and 2025 (P01 Clinical Trial Optional)
 (PAR-23-059)
- SBIR/STTR Small Business Funding
 - Investigator-initiated
 - I-Corps @ NIH (<u>PAR-22-073</u>)
 - Investor Initiatives
 - Technical and Business Assistance Programs
 - Contract Opportunities (NCI-defined Topics)
- <u>Cancer Moonshot Scholars</u> (R01) (<u>RFA-CA-22-050</u>)
- Outstanding Investigator Award (R35) (RFA-CA-22-045)
- <u>Innovative Molecular Analysis Technologies</u>
 (IMAT) Program
 - Technology Development for Cancer Control and Population Science Research (NOT-CA-23-037)
 - Technologies and Informatics Tools for Cancer Metabolomics (NOT-CA-22-083)
 - <u>Informatics Technology for Cancer</u> <u>Research (ITCR)</u>

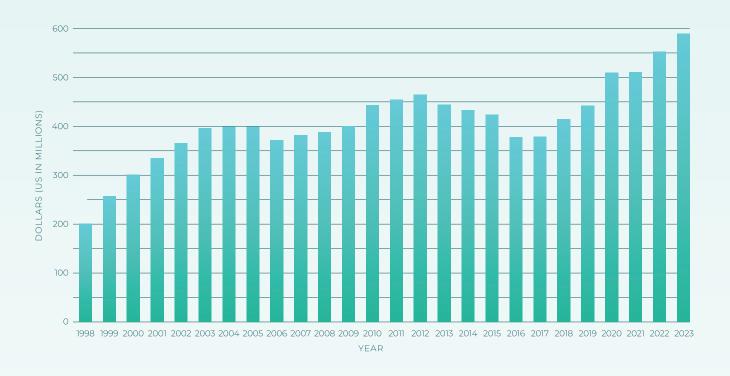
INVESTMENTS IN CANCER CONTROL RESEARCH

For more than 25 years, researchers funded by DCCPS have been advancing the science to improve public health. Major programmatic areas of research include epidemiology and genomics, behavioral health, healthcare delivery, surveillance, health equity, implementation science, and cancer survivorship.

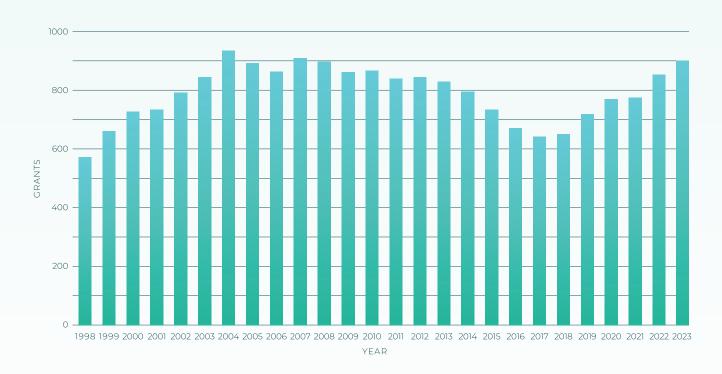
In fiscal year 2023, DCCPS funded approximately 900 grants valued at nearly \$580 million, supporting work in the United States and internationally aimed to reduce risk, incidence, and deaths from cancer, and to enhance the quality of life for cancer survivors. In addition, the division funded \$95 million in contracts, which include the SEER Program. While the majority of DCCPS funding is for investigator-initiated research project grants, the division also uses other strategies to support and stimulate research, such as multicomponent specialized research centers, cancer epidemiology cohorts, and supplements to NCI-Designated Cancer Center support grants.

Learn more about the DCCPS grant portfolio and funding trends at http://maps.cancer.gov/overview.

TOTAL DOLLARS (IN MILLIONS)



TOTAL NUMBER OF GRANTS



DCCPS BY THE NUMBERS

AS A WINDOW INTO
THE MANY WAYS DCCPS
PROVIDES RETURN ON
INVESTMENT, WE HIGHLIGHT
HERE SOME SNAPSHOTS OF
PROGRESS OVER THE YEAR.







F 898,332

Since the Automated Self-Administered 24-Hour (ASA24®) Dietary Assessment Tool was released in 2009, researchers have collected 898,332 dietary recalls or food records. On average in fiscal year (FY) 2023, 530 studies per month used ASA24 to collect dietary data, and 145 new studies registered each month to use ASA24. As of September 2023, more than 800 peerreviewed scientific publications cited the use of ASA24 to collect dietary data.



77 Million

The Annual Report to the Nation on the Status of Cancer, Part 2, highlighted findings on changes in cancer diagnoses in the United States during the first year of the COVID-19 pandemic. The findings suggest that many cancers were not being diagnosed in a timely manner during the early part of the pandemic, likely due to interruptions in medical care. The report garnered more than 60 stories in the

media, reaching an audience of more than 335,000 people. Total impressions—or the number of times a particular news article has been viewed—were measured at 77 million from all media coverage.



The Cancer Epidemiology Descriptive Cohort Database (CEDCD) contains descriptive information from over 60 cohorts, with participants from 20 different countries. CEDCD includes brief descriptions of the cohorts, contact information, questionnaires, types of data collected, enrollment numbers. number of cancer cases, and number of biospecimens collected. Its purpose is to foster collaboration and encourage cohortbased research. In the past year, CEDCD was accessed more than 3,000 times, with over 2,500 new users.



\$ 562,000

SEER-CAHPS links data from Surveillance. Epidemiology and End Results (SEER), Medicare enrollment data. Medicare claims. and Medicare Consumer Assessment of Healthcare Providers and Systems (CAHPS) surveys of the patients' experience with their care. SEER registry and Medicare claims data have been linked with CAHPS survey data through 2019, yielding more than 562,000 respondents with cancer, and more than 1.3 million respondents without cancer living in a SEER region. The next scheduled data update will occur in early 2025, for data through 2021.



SEER-MHOS (Medicare Health Outcomes Survey) is one of the largest US populationbased cohorts that provides information about cancer health outcomes and quality of life. This data resource contains over 1.2 million survey respondents. Updated data linkages between SEER, Medicare enrollment, Part D enrollment and claims, and the MHOS are now available, with data through 2021.



2,285

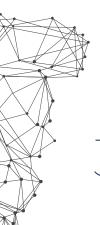
In FY 2023, there were 2,285 webinar attendees for NCI Office of Cancer Survivorship (OCS) events, including webinars in the OCS Director's Series. the New Investigators Series, and funding opportunity presentations.



NCI awarded \$50 million over 5 years to five <u>Centers for Cancer Control Research</u> in Persistent Poverty Areas across nine states. The initiative aims to alleviate the cumulative effects of persistent poverty on cancer outcomes by building research capacity, fostering cancer prevention research, and promoting the implementation of community-based programs.



In the 20 years since its inception, more than 14.000 data users have utilized the Health Information National Trends Survey® (HINTS). which monitors changes in the rapidly evolving fields of health communication and health information technology. As of September 2023, 845 publications in 284 peer-reviewed journals had used data from the nationally representative, public-use HINTS data sets.





63,000

Across 16 survey administrations, HINTS has surveyed more than 63,000 American adults, tracking shifts in the communication landscape and information support needs in the population.



50

In FY 2023, DCCPS hosted over 50 fellows from various training mechanisms, including Cancer Research Training Awardees, Cancer Prevention Fellows, summer interns, University of Maryland semester interns, iCure Fellows, Presidential Management Fellows, and Management Interns.



Population-based Research to Optimize the Screening Process (PROSPR) is an NCI-funded research network that consists of 10 diverse healthcare delivery systems across the United States. The PROSPR cohort includes approximately 11 million individuals. The data were collected to investigate the screening processes for three cancers: cervical, colorectal, and lung. Researchers may request access to PROSPR data through PROSPR DataShare.



In FY 2023, OCS shared an additional five new cancer survivor stories on its Cancer Survivor Stories webpage. The page had over 11,000 page views by 6,940 visitors.



2,028

The Federal Cervical Cancer Collaborative (FCCC), stemming from the Cancer MoonshotSM initiative, focuses on underserved groups to improve cervical cancer screening, follow-up, and referrals for care. Collaborating with partners in DCCPS, the FCCC has played a key role in the development of a provider toolkit for use in safety-net settings of care. Between May and August 2023, the FCCC toolkit had 2,028 views among 1,381 active users.



25

Twenty-five early-stage investigators participated in the 2023 Implementation Science Centers in Cancer Control (ISC3) Annual Grantee Meeting, held in Boston, MA.



102

One-hundred and two pilot projects have been developed by ISC3 since the program's inception in 2019.





319,078

Cancer information seeking is recognized as an important, life-saving behavior. DCCPS analyzed 319,078 inquiries received by NCI's Cancer Information Service (CIS) from September 2018 through August 2023 to better understand the cancer informationseeking behaviors of the general public, cancer survivors, caregivers, and health professionals. These descriptive analyses provide insights that may help public health agencies deliver, prioritize, and tailor their messaging and responses to specific audiences.



6,100

The current sample grant applications published by the Epidemiology and Genomics Research Program (EGRP) were downloaded more than 6.100 times in FY 2023.



In total, 900 cancer survivors will be enrolled in research projects as part of the Exercise and Nutrition Interventions to Improve <u>Cancer Treatment-Related Outcomes</u> (ENICTO) in Cancer Survivors consortium, a vast collection of behavioral intervention clinical trials testing the effects of exercise and nutrition interventions on cancer treatment-related outcomes.



624

In FY 2023, there were, on average, 624 individuals registered per webinar in the public-facing Obesity & Cancer webinar series. Webinar topics included physical activity of pediatric cancer survivors, prostate cancer, structural racism, and inflammation.



33

Since the inception of the Consortium for Cancer Implementation Science (CCIS) in 2019, 33 tools and resources ("public goods") have been developed through the consortium to support cancer implementation science.



3.4 Million

In FY 2023, 3.4 million people visited Smokefree.gov to access evidence-based information, interactive digital tools, and encouragement for assistance in quitting cigarettes, e-cigarettes, and other tobacco products.



186

In FY 2023, Smokefree.gov was visited by people from every state across the United States and 186 countries around the world. Smokefree.gov provides millions of people each year with information and digital tools to help them quit using tobacco products.





94

The <u>database of Genotypes and Phenotypes</u> (dbGaP) at the National Center for Biotechnology Information archives datasets and makes them available to the scientific community. As of September 2023, 94 datasets from DCCPS-funded studies can be accessed through dbGaP.



902

The Healthy Eating Index (HEI) is a scoring metric that can be used to determine overall diet quality, as well as the quality of several dietary components. Since the first version of the HEI was released in 2008, researchers have used HEI in 783 publications. A total of 902 people registered for a September 2023 webinar to learn about two new iterations of the HEI: HEI-2020 and HEI-Toddlers-2020.



🏝 11,861

In FY 2023, 11,861 Evidence-Based Cancer Control Programs resources were downloaded, providing program planners and public health practitioners access to research materials to implement in community and clinical practice.



76%

There was a sustained increase in the number of health disparities and health equity grants within the division's overall portfolio. In FY 2023, 76% of the division's funded awards included a health disparities component.



21,000

The Surveillance, Epidemiology, and End Results (SEER) Program provides information on cancer statistics to help reduce the cancer burden among the US population. Since 1975, researchers have used SEER data for their primary analysis in more than 21,000 publications.



23 Million

The SEER website had almost 23 million total page views in FY 2023.



STAY CURRENT WITH DCCPS



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SOCIAL MEDIA

Visit: https://cancercontrol.cancer.gov/about-dccps/connect-with-dccps