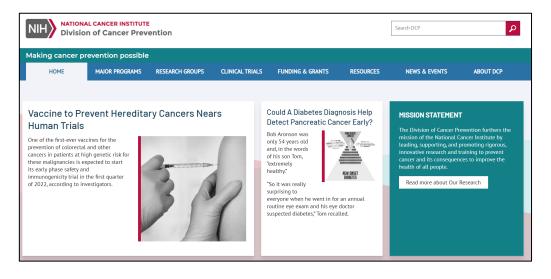
NCI Division of Cancer Prevention

Research Program Focus Areas and Funding Opportunities for Investigator-initiated Research



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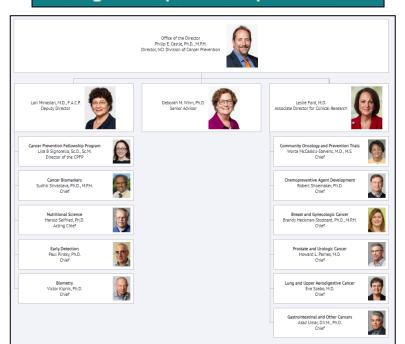


 The Division of Cancer Prevention (DCP) is the extramural division of the National Cancer Institute (NCI) devoted to cancer prevention research.

- DCP leads, promotes, and supports rigorous, innovative cancer prevention research and training to reduce the risk, burden, and consequences of cancer for all people.
- DCP research covers the spectrum of cancer prevention research including early detection, screening, prevention/interception, symptom management and supportive care activities.



Making cancer prevention possible



https://prevention.cancer.gov

Cancer Biomarkers

Research to identify, develop and validate biomarkers for early cancer detection and risk assessment.



Early Detection

Research on the effectiveness and clinical impact of early detection technologies and practices.



Community Oncology and Prevention Trials

Clinical oncology trials in cancer prevention and control in community settings.



Biometry

Supports research in biostatistical, clinical trial, and epidemiological methodologies and mathematical modeling of processes relevant to cancer prevention.



Chemopreventive Agent Development

Research on cancer preventive agent development, from preclinical studies to initiation of phase I clinical trials.



Nutritional Science

Understanding how diet and food components affect cancer risk and tumor cell behavior.



Breast and Gynecologic Cancer

Prevention and early detection of breast, cervix, endometrial and ovarian cancers and their precursors.



Prostate and Urologic Cancer

Conducts and supports research on the prevention and early detection of prostate, bladder, and skin cancers.



Lung and Upper Aerodigestive Cancer

Conducts and supports research on the prevention and early detection of lung and head and neck cancers.



Gastrointestinal and Other Cancers

Prevention and early detection of colorectal, esophageal, liver, pancreas and hematolymphoid cancers.



DCP-supported preclinical and clinical research networks/programs

PREVENT Cancer Preclinical Drug Development Program (PREVENT)

The peer-reviewed research pipeline supports new prevention interventions and biomarkers headed toward clinical trials.

Cancer Prevention Clinical Trials Network (CP-CTNet)

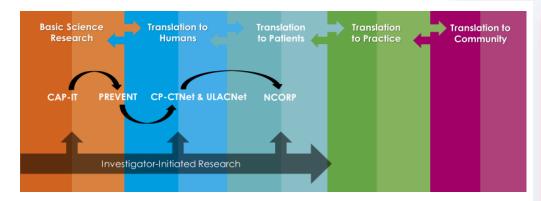
Research Centers develop and conduct early phase clinical trials to assess the preventive potential of agents and interventions of varying classes.

US-Latin American-Caribbean HIV/HPV-Cancer Prevention Clinical Trials Network (ULACNet)

Partnership Centers will focus on improving prevention of human papillomavirus (HPV)-related cancers in human immunodeficiency virus (HIV)-infected individuals.

Supportive Care and Symptom Management

Clinical trials and grant-funded projects examine symptoms and morbidities related to cancer and its treatment, with a focus on interventions to improve quality of life.



NCI Community Oncology Research Program (NCORP)

A clinical trials network of cancer professionals brings research



to diverse populations across the country in the communities where most patients live.

DCP-supported early detection/screening and translational research networks/programs

Liquid Biopsy Consortium A partnership with academic LIQUID BIOPSY and BIOPSY are seen to be a seen to be a

with academic and industrial laboratory teams developing non

teams
developing noninvasive liquid
biopsy techniques to detect early
stage cancer from biomarkers in
blood, urine and sputum.

Pancreatic Cancer Detection Consortium (PCDC)

Research teams develop and test new molecular and imaging biomarkers to detect early stage pancreatic ductal adenocarcinoma and its precursor lesions.

Small Cell Lung Cancer (SCLC) Consortium

Six investigators conduct research to expand the understanding of the critical molecular changes in the lung that precede the development of frank SCLC and/or to identify populations at particularly high risk for SCLC.

Alliance of Glycobiologists for Cancer Research

Tumor
Glycomics
Laboratories
work to reveal
cancer-related
dynamics of complex
carbohydrates.

Translational Liver Cancer (TLC) Consortium

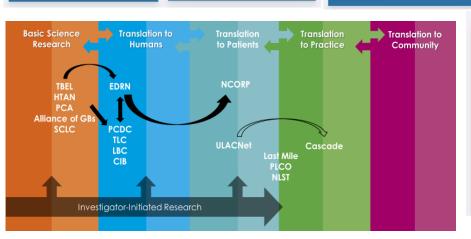
Five
Translational
Research
Centers conduct
studies to
improve surveillance of liver
cancer in high-risk populations,
increase detectability at early
stages, and stratify at-risk patients.

Consortium for Imaging and Biomarkers (CIB)

Research Units integrate imaging strategies with biomarkers to



improve cancer screening, early detection of aggressive cancer, assessment of cancer risk, and diagnosis of early stage cancer.



Early Detection Research Network (EDRN)

Labs and
centers bring
together
comprehensive
infrastructure
and resources critical to discovery,
development and validation of
biomarkers for cancer risk and
early detection.

Consortium for Molecular Characterization of Screen-Detected Lesions

Seven
laboratories and
a coordinating
center focus on
identifying
screening-detected i

screening-detected pre-cancers and early cancers, including within the tumor microenvironment.

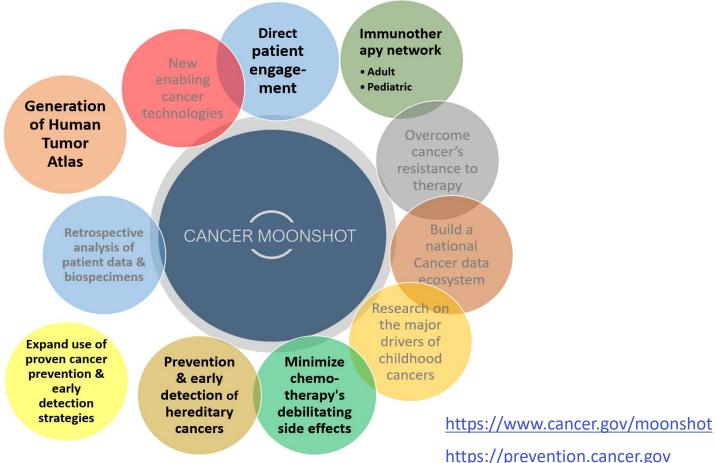
NCI Cervical Cancer 'Last Mile' Initiative

A public private partnership between several stakeholders to validate self-sampling as a comparable (non-inferior) alternative to provider-collected sampling for HPV testing in cervical cancer screening.





DCP-supported research via Cancer MoonshotsM



DCP Focus Areas for Investigator-initiated Research Studies on Cancer Prevention



Early Detection Biomarkers

Cancer Screening

Nutrition and Cancer Prevention

Cancer Prevention/Interception Interventions

Community Oncology and Supportive Care/Symptom Management

DCP Focus Areas for Investigator-initiated Research Studies: <u>Early Detection Biomarkers</u>

- Discovery, development, and validation of biomarkers (e.g., molecular and imaging) for cancer prevention through screening and risk assessment
- Identification and surveillance of individuals with predisposing conditions or syndromes for the development of pre-invasive or invasive malignancies
- Discovery of tools, technologies, and algorithms to improve accuracy of discrimination among benign vs. malignant lesions or among indolent vs. aggressive early cancers

For more information, please email Sudhir Srivastava, PhD, MPH srivasts@mail.nih.gov

DCP Focus Areas for Investigator-initiated Research Studies: <u>Early Detection Biomarkers</u>

Advancing Translational and Clinical Probiotic/Prebiotic and Human Microbiome Research	PA-18-902 (R01 Clinical Trial Optional)
Basic and Translational Research on Adducts in Cancer Risk Identification and Prevention	PAR-19-251 (R01 Clinical Trial Optional)
Basic and Translational Research on Adducts in Cancer Risk Identification and Prevention	PAR-19-252 (R21 Clinical Trial Optional)
Cancer Tissue Engineering Collaborative: Enabling Biomimetic Tissue-Engineered Technologies for Cancer Research	PAR-19-113 (R01 Clinical Trial Optional)
Imaging, Biomarkers and Digital Pathomics for the Early Detection of Premetastatic Aggressive Cancer	PAR-19-264 (R01 Clinical Trial Optional)

For more information, please email Sudhir Srivastava, PhD, MPH srivasts@mail.nih.gov https://prevention.cancer.gov



DCP Focus Areas for Investigator-initiated Research Studies: <u>Early Detection Biomarkers</u>

Notice of Special Interest (NOSI): Advancing Head and Neck Cancer Early Detection Research (AHEAD)	NOT-CA-20-031
Notice of Special Interest (NOSI): Leveraging Real- World Imaging Data for Artificial Intelligence-based Modeling and Early Detection of Abdominal Cancers	NOT-CA-21-028
Notice of Special Interest (NOSI): Single-Cell Proteomics for Interrogating Premalignant and Early Malignant Lesions	NOT-CA-20-044
Program to Assess the Rigor and Reproducibility of Extracellular Vesicle-Derived Analytes for Cancer Detection	PAR-20-053 (R01 Clinical Trial Not Allowed)
Secondary Analysis and Integration of Existing Data to Elucidate the Genetic Architecture of Cancer Risk and Related Outcomes	PAR-20-277 (R21 Clinical Trials Not Allowed)
Secondary Analysis and Integration of Existing Data to Elucidate the Genetic Architecture of Cancer Risk and Related Outcomes	PAR-20-276 (R01 Clinical Trial Not Allowed)

For more information, please email Sudhir Srivastava, PhD, MPH srivasta@mail.nih.gov https://prevention.cancer.gov

DCP Focus Areas for Investigator-initiated Research Studies: <u>Cancer Screening</u>

 Clinical trials of screening modalities and management of screen positives, with defined clinical endpoints as well as secondary analyses of clinical trial and observational study data and biospecimens.

 Development of epidemiological approaches for evaluation of the performance characteristics and/or clinical effects of early detection modalities and the development of methodologic approaches for the design and analysis of screening trials.

 Early small-scale evaluation studies and definitive prospective evaluation studies to evaluate clinical effectiveness via assessment of the benefits (including mortality reduction) and associated harms consequent to cancer screening/early detection

For more information, please email Paul Pinsky, PhD at pinskyp@mail.nih.gov



DCP Focus Areas for Investigator-initiated Research Studies: Nutrition and Cancer Prevention

- Research on diet, nutrition, eating behaviors, energy balance, obesity, exercise, food quality, food preparation, food processing, diet therapies and nutritional agents as they relate to prevention, initiation, and recurrence of cancer.
- Diet related studies on understanding of genetic, age-related, and environmental factors that contribute to variation in response to foods and food components at a molecular level.
- Quality of measurements of dietary intake and physical activity including technological and methodological improvements of novel assessment approaches and methods to investigate the patterns and multidimensionality of diet and physical activity behavior with the environmental context of such behaviors

For more information, please email Harold Seifried, PhD at seifrieh@mail.nih.gov

DCP Focus Areas for Investigator-initiated Research Studies: Nutrition and Cancer Prevention

Administrative Supplement for Research on Dietary Supplements (Admin Supp-Clinical Trial Not Allowed)	PA-20-227
Advancing Mechanistic Probiotic/Prebiotic and Human Microbiome Research	PA-18-876 (R01 Clinical Trial Not Allowed)
Diet and Physical Activity Assessment Methodology	PA-18-856 (R01 Clinical Trial Not Allowed)
Diet and Physical Activity Assessment Methodology	PAR-18-857 (R21 Clinical Trial Not Allowed)
Modulating Intestinal Microbiota to Enhance Protective Immune Responses against Cancer	PAR-19-198 (R01 Clinical Trial Not Allowed)
Modulating Intestinal Microbiota to Enhance Protective Immune Responses against Cancer	PAR-19-199 (R21 Clinical Trial Not Allowed)
Physical Activity and Weight Control Interventions Among Cancer Survivors: Effects on Biomarkers of Prognosis and Survival	PAR-18-893 (R01 Clinical Trial Optional)
Physical Activity and Weight Control Interventions Among Cancer Survivors: Effects on Biomarkers of Prognosis and Survival	PAR-18-892 (R21 Clinical Trial Optional)
Validation Studies of Analytical Methods for Dietary Supplement Constituents (Admin Supp - Clinical Trial Not Allowed)	PA-20-252

For more information, please email Harold Seifried, PhD at seifrieh@mail.nih.gov

DCP Focus Areas for Investigator-initiated Research Studies: <u>Cancer Prevention/Interception Interventions</u>

- In vitro and in vivo studies utilizing cell lines, organoids, spheroids, and/or animal and computational modeling to evaluate intervention efficacy, toxicity, and biomarkers for their potential in cancer prevention/interception.
- Early phase cancer prevention and/or cancer interception clinical trials (Phases 0, I, and II) that
 evaluate dietary supplements in pharmacologic ranges, FDA-approved and investigational drugs,
 small molecules, vaccines, immunomodulators, biologics, biomarkers of efficacy and response, and
 medical devices and procedures.
- Human studies and/or clinical trials on interventions to prevent and/or intercept the development of pre-cancerous lesions, progression to invasive cancer, recurrence of precancerous lesions, and risk reduction for genetic and non-genetic cancer-predisposing conditions at the individual level.

For more information, please email Brandy Heckman-Stoddard, PhD, MPH at heckmanbm@mail.nih.gov



DCP Focus Areas for Investigator-initiated Research Studies: <u>Community Oncology and Supportive Care/Symptom Management</u>

 Community-based clinical trials in cancer prevention, surveillance, screening, symptom science, translational research, and other activities related to supportive care and prevention of related morbidities.

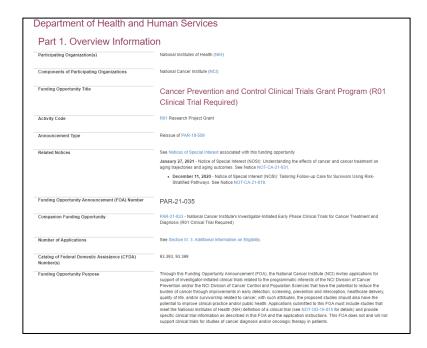
- Studies on management of toxicities and morbidities in populations undergoing treatment for cancer, including advanced disease, including studies of supportive care for patients and families, and functional outcomes and studies of end-of-life and palliative care
- Ancillary and correlative studies linked to clinical trials supported through the NCI Community
 Oncology Research Program (NCORP) and the National Clinical Trials Networks (NCTNs)

For more information, please email Worta McCaskill-Stevens, MD, MS at mccaskiw@mail.nih.gov



DCP Funding Opportunities for Investigator-initiated Clinical Trials on Cancer Prevention

PAR-21-035 Cancer Prevention and Control Clinical Trials Grant Program (R01)



Project Type	Investigator-initiated clinical trialsIND filed by investigator/institution
Submission deadlines	 General: March 5, July 5, November 5 AIDS-related: May 7, September 7, January 7
Funding caps	 Not specified; project-specific Projects with direct costs >\$500,000/year any single year require pre-submission discussion via Awaiting Receipt of Application (ARA)

https://grants.nih.gov/grants/guide/pa-files/par-21-035.html

For more information, please email Brandy Heckman-Stoddard, PhD, MPH at heckmanbm@mail.nih.gov



DCP Funding Opportunities for Investigator-initiated Clinical Trials on Cancer Prevention

PAR-19-356 NCI Clinical and Translational Exploratory/Developmental Studies (R21)



Project Type	 Investigator-initiated exploratory/pilot clinical trials IND filed by investigator/institution
Submission deadlines	 General: June 21, 2021; October 20, 2021; February 22, 2022; June 21, 2022 AIDS-related: July 20, 2021; December 17, 2021; March 21, 2022; July 20, 2022
Funding caps	\$275,000 direct costs over 2 years; \$200,000 max in one year

https://grants.nih.gov/grants/guide/pa-files/PAR-19-356.html

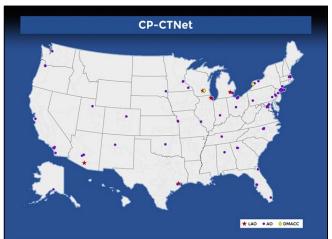
For more information, please email Brandy Heckman-Stoddard, PhD, MPH at heckmanbm@mail.nih.gov



DCP Funding Opportunities for Clinical Trials on Cancer Prevention

Cancer Prevention Clinical Trials Network (CP-CTNet)





Project Type	 UG1/U24 Cooperative Agreement Network IND filed by investigator/institution or NCI
Submission deadlines	 Investigators can join UG1s led by Lead Academic Organizations (LAOs); submit concepts for approvals; approved concepts move to protocol development and conduct in CP-CTNet sites Concept submission deadlines every quarter
Funding caps	 Not specified; project-specific CP-CTNet LAOs and Data Management, Auditing, and Coordinating Center (DMACC) provide clinical trials management support

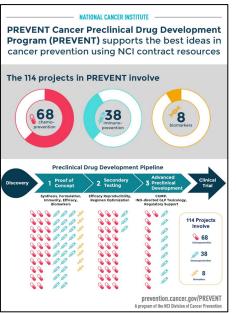
https://prevention.cancer.gov/cp-ctnet

For more information, please email **Eva Szabo, MD** at szaboe@mail.nih.gov

DCP Funding Opportunities for Preclinical studies on Cancer Prevention

PREVENT Cancer Preclinical Drug Development Program (PREVENT)





Project Type	 IND-enabling support (proof-of-concept, secondary testing, advanced preclinical development) via NCI Research and Development Contract resources IND filed by investigator/institution or NCI
Submission deadlines	Submission deadlines twice-yearly: second Monday in January and July
Funding caps	 Not specified; project-specific NCI contracts support generation of data and materials to further advance novel cancer preventive agents or biomarkers toward IND filing and proof-of-principle clinical testing.

https://prevention.cancer.gov/prevent

For more information, please email **Shizuko Sei, MD** at seis@mail.nih.gov

NIH/NCI Funding Opportunity Announcements in support of Cancer Prevention*

FOA number	FOA title	FOA weblink
PA-20-185	NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)	https://grants.nih.gov/grants/guide/pa-files/PA-20-185.html
PAR-20-077	National Cancer Institute Program Project Applications (P01 Clinical Trial Optional)	http://grants.nih.gov/grants/guide/pa-files/PAR-20-077.html
PAR-21-206	Academic-Industrial Partnerships for Translation of Technologies for Diagnosis and Treatment (R01 - Clinical Trial Optional)	https://grants.nih.gov/grants/guide/pa-files/PAR-21- 206.html
PA-21-259 PA-21-260	PHS 2021-2 Omnibus Solicitation of the NIH, CDC and FDA for Small Business Innovation Research Grant Applications (Parent SBIR [R43/R44])	https://grants.nih.gov/grants/guide/pa-files/PA-21-259.html https://grants.nih.gov/grants/guide/pa-files/PA-21-260.html https://sbir.cancer.gov/funding

*Not an exhaustive list; for illustrative purposes only

NIH NATIONAL CANCER INSTITUTE

Cancer Prevention Fellowship Program

Applications accepted May-August for posit starting the following June.

Be a part of the program that supports postdoctoral research and professional development, plus offers:

- · Competitive stipends, relocation expenses, health insurance benefits, and travel allowances
- Support for up to four years
- Opportunity to earn your MPH, sponsored by NCI
- Research opportunities with experienced NCI mentors
- A cohort of fellows spanning STEM and other fields





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Q 240-276-5626



Questions? More Information? vikrant.sahasrabuddhe@nih.gov

https://prevention.cancer.gov



www.cancer.gov/espanol