FUTURE DIRECTIONS EXECUTIVE SUMMARY

An immediate and intensified focus on these topics will accelerate scientific progress and increase the impact of DCCPS-sponsored research. They do not replace existing funded areas of research.



HEALTH EQUITY

Promote cancer control research that leads to equitable and optimal health outcomes for all populations.

- Expand cancer surveillance by including data elements that allow disaggregated reporting and by improving surveillance of smaller populations.
- Advance the development and evaluation of tailored interventions to eliminate disparities caused by avoidable and modifiable risk factors.
- Invest in the science of inclusion to recruit and retain diverse populations in cancer control research, and address systemic and implicit biases to ensure that research efforts reflect the experiences of those affected by cancer.
- Call for research to inform innovative models of care that address the social conditions that impact health care access, utilization, and health outcomes.

- Expand capacity for minority-serving institutions, community partners, and practitioners to engage meaningfully in equity-focused cancer control research.
- Integrate a health equity lens into the Division of Cancer Control and Population Sciences' (DCCPS) priority setting (both scientific and nonscientific), and identify key partners within DCCPS and NCI, across the National Institutes of Health (NIH), and with other organizations and communities to reduce cancer control inequities and optimize health.

DATA STRATEGIES

Develop innovative strategies to efficiently and ethically collect, analyze, share, and reuse data to fill information gaps and accelerate research that will reduce the cancer burden.

- Identify and prioritize data gaps and infrastructure needs related to DCCPS programs.
- Address prioritized data gaps by supporting innovative approaches for comprehensive data collection and data linkages, including high-quality metadata and data documentation.
- Address prioritized infrastructure gaps by developing, enhancing, and implementing tools, approaches, and resources for optimal accessibility, sharing, and reuse of DCCPS-supported data.
- Engage all of DCCPS' stakeholders to ensure that our data strategies meet and fill their needs, including those outside the conventional research enterprise.
- Encourage and nurture a findable, accessible, interoperable, reusable, traceable, licensed, and connected (FAIR-TLC) data culture.
- Identify key partners within DCCPS and NCI, across NIH, and with other organizations.



EVIDENCE-BASED CANCER CONTROL POLICY RESEARCH

Evaluate existing policies and inform future policies that impact optimal approaches for cancer prevention, control, care, and outcomes.

- Identify and prioritize novel opportunities to address gaps in and barriers to research, including capitalizing on existing data or developing new data resources.
- Support research that informs and evaluates federal, state, and local policies.
- Identify methodological approaches to study policy, and consider how such research can promote population health.
- Build capacity to conduct policy research and disseminate research that informs policy development.
- Determine and use best-practice communication strategies with policymakers and intermediaries.
- Generate evidence to inform or evaluate policy in diverse populations and communities, with a particular focus on under-represented or disadvantaged groups.

DIGITAL HEALTH

Expand and enhance digital health research to develop and test the efficacy and effectiveness of technology-based interventions that support cancer prevention and control.

- Identify gaps and opportunities in digital health research related to programs in DCCPS.
- Achieve better collaboration and coordination within DCCPS, across NCI and NIH, and with other federal partners on digital health activities.
- Identify and address multilevel barriers to equitable access to, engagement with, and use of digital health technologies across constituent groups and cancer-related settings.
- Develop a research agenda to investigate and address ethical, privacy, regulatory, interoperability, and financial issues that limit adoption and sustainment of digital health in cancer care.
- Support research demonstrating that digital health technologies in cancer control are valid, reproducible, equitable, efficacious, and implementable for all populations and inform evidence-based policies.
- Address the need for training and workforce development focused on the application and dissemination of digital health research and technology in cancer control.



MODIFIABLE RISK FACTORS

Identify and intervene upon modifiable risk factors, alone and in combination, to prevent cancer across the life course, and among cancer survivors, to improve treatment response and health outcomes.

- Identify research gaps and intervention needs regarding modifiable risk factors to mitigate cancer risk.
- Address prioritized data, measurement, and intervention needs for risk factors with greater spatial and temporal alignment across the life course and among specific subgroups.
- Support research that models effects of risk factors and interventions over the life course and across birth cohorts to investigate the impact on risk trajectories, incidence, and mortality.
- Promote use of advanced statistical and computational methods to understand causal pathways of modifiable risk factors on variation in cancer risk, response to treatment, and survival.
- Support research to evaluate the effects of built, natural, economic, health care, and policy environment on modifiable risk factor clusters and on response to interventions.
- Develop and support an infrastructure for the efficient implementation of trials on behavioral and structural risk factor interventions.



CLIMATE CHANGE

Expand and enhance research to understand and mitigate the effects of environmental risk factors and disruptions to care resulting from climate change.

- Develop novel measures to enable more precise, accurate measurement and novel methods to model exposures and risks of climate change and to test intervention strategies.
- Support research on the effects of climate change events on cancer risk, care, and survivors and lifetime exposure research to study the cumulative effects of single or multiple exposures.
- Identify research infrastructure needs and data resources and linkages that will allow rapid development and support testing of sustainable and climate-responsive interventions.
- Develop and implement routine surveillance of the impact of climate-related events on cancer-related exposures, health behaviors, health care delivery, and cancer outcomes.

- Identify cumulative exposures in environmental justice communities and best practices to reduce these exposures using community-engaged approaches.
- Achieve better collaboration and coordination within DCCPS, across NCI and NIH, and with other federal partners on climate change activities.



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