

National Cancer Advisory Board (NCAB)
***ad hoc* Subcommittee on Population Science, Epidemiology, and Disparities**

9 February 2023
11:00 a.m.–12:00 p.m. EST

Virtual Meeting

SUMMARY

Subcommittee Members

Dr. Electra D. Paskett, Chair
Dr. Francis Ali-Osman
Dr. Philip E. Castle, Executive Secretary
Dr. Christopher R. Friese
Mr. Lawrence O. Gostin (absent)

Dr. Nikan Khatibi (absent)
Dr. Margaret R. Spitz
Dr. Susan Thomas Vadaparampil
Dr. Karen M. Winkfield

Other Participants

Dr. Nilofer S. Azad, NCAB
Dr. Anna D. Barker, NCAB
Dr. Monica Bertagnolli, Director, National
Cancer Institute, (NCI)
Ms. Shayla Beckham, NCI
Dr. John D. Carpten, Chair, NCAB
Dr. James H. Doroshow, NCI
Dr. Howard J. Fingert, NCAB
Dr. Paulette S. Gray, NCI
Dr. Amy B. Heimberger, NCAB

Dr. Scott W. Hiebert, NCAB
Dr. Douglas R. Lowy, NCI
Ms. Anne Lubenow, NCI
Ms. Thu Nguyen, NCI
Mr. Ricardo W. Rawle, NCI
Dr. Peter J. Wirth, NCI
Ms. Joy Wiszneauckas, NCI
Dr. Tamara Korolnek, The Scientific Consulting
Group, Inc., Rapporteur

Welcome and Opening Remarks

Dr. Electra D. Paskett, Marion N. Rowley Professor of Cancer Research and Director, Division of Cancer Prevention and Control, Department of Internal Medicine, College of Medicine, The Ohio State University, Columbus, Ohio

Dr. Electra D. Paskett, Subcommittee Chair, welcomed the participants to the NCAB *ad hoc* Subcommittee on Population Science, Epidemiology, and Disparities (Subcommittee) meeting. She invited Dr. Monica Bertagnolli, NCI Director, to address the Subcommittee. Dr. Bertagnolli expressed enthusiasm and support for the efforts of the Subcommittee.

Review of the Subcommittee Charge

Dr. Electra D. Paskett

Dr. Paskett reminded the participants that the purpose of the Subcommittee is to advise the NCAB and the NCI Director on strategic approaches and opportunities to enhance the NCI's contribution to population science, epidemiology, and disparities. The Subcommittee is responsible for identifying opportunities to address populations facing disparities through multidisciplinary programs in research, surveillance, patient care, primary prevention, education, and cancer control.

To this end, the Subcommittee convened the *ad hoc* Working Group on Strategic Approaches and Opportunities in Population Science, Epidemiology, and Disparities in May 2018. The Working Group

was charged by Dr. Norman E. Sharpless, former NCI Director, to develop recommendations regarding how the observational extramurally supported cancer epidemiology cohort program could be enhanced. In consultation with the NCI, the Working Group identified several issues related to the extramurally supported cancer epidemiology cohort program and issued a [report](#) that included key recommendations related to these issues. The report has informed the NCI's recent requests for applications (RFAs), and multiple report recommendations have been implemented. Dr. Paskett pointed out that the Working Group identified the need for additional cohorts with regard to research on underrepresented populations. She noted that the Hispanic cohort has received additional funding as a result of the report.

In December 2019, following the publication of the extramural cohort report, the Subcommittee voted to convene the *ad hoc* Working Group on Strategic Approaches and Opportunities for Research on Cancer Among Racial and Ethnic Minorities and Underserved Populations. This *ad hoc* Working Group was charged with identifying and evaluating the current status of—and barriers to progress on—NIH- and NCI-funded research on cancer in racial and ethnic minorities and underserved populations, as well as potential strategic approaches to better support such research. Dr. Paskett noted that the [final report](#) developed by this Working Group was presented to the NCI in December 2022 and currently is available to the public.

New Business and Future Priorities

Dr. Electra D. Paskett

Dr. Paskett reminded the meeting participants that the Subcommittee was formed under the direction of Dr. Sharpless in response to feedback regarding the lack of population science input into the NCI's activities. She highlighted the present opportunity for the Subcommittee to focus on new approaches and opportunities in population science, epidemiology, and disparities.

Dr. Paskett solicited suggestions from the meeting participants regarding future priorities for the Subcommittee to address.

Discussion

Dr. Margaret R. Spitz commented that funding for training and educational programs for population scientists is an issue that should be revisited by the Subcommittee. Mechanisms that previously were used to address population science training—including the Cancer Prevention, Control, Behavioral Sciences, and Population Sciences Career Development Award (a K07 award) and the Cancer Research Education Grants Program (an R25 award)—are no longer available. Dr. Paskett noted that the Subcommittee previously had engaged personnel from the Cancer Training Branch to discuss the funding of training in this area. Dr. Christopher R. Friese agreed that a better understanding of gaps and opportunities in the population science workforce is needed. He added that an increasing number of physicians and other clinicians are requesting training in this area; however, current mechanisms are unable to meet this demand.

Dr. Philip Castle, Executive Secretary, commented that workforce training is an area of concern for both himself and Dr. Katrina Goddard, the director of the Division of Cancer Control and Population Sciences (DCCPS). Dr. Castle informed the Subcommittee that he and Dr. Goddard are performing a portfolio analysis of training opportunity gaps for two workforce landscapes: the population science/cancer control workforce and the translational science/cancer prevention workforce. Dr. Castle added that both areas likely would benefit from increased expansion and additional diversity. The cancer prevention workforce,

in particular, would benefit from added attention because most biologists interested in translational research are drawn to the field of oncology rather than cancer prevention. Dr. Castle emphasized that training opportunities built into RFAs would provide maximal benefit if they are offered to trainees at earlier stages of their careers. Dr. Paskett asked Dr. Castle in which ways the Subcommittee could support these efforts. Dr. Castle requested that he and Dr. Goddard be invited to present their findings to the Subcommittee at the Joint Board of Scientific Advisors/NCAB Meeting in June 2023. Dr. Castle listed additional training efforts in which he is involved, including the expansion of the [Cancer Prevention Fellowship Program](#) (CPFP), efforts to develop an international component to the CPFP, and a collaboration with the White House Office of Science and Technology Policy to create a CPFP policy rotation. In response to a question from Dr. Paskett, Dr. Castle affirmed that diversity and underrepresented populations would be included in the workforce landscape analysis.

Dr. Karen M. Winkfield pointed out that the topic of social determinants of health (SDOH) had been touched on at the 2022 meeting of the American Association for Cancer Research; the cancer field agrees that a unified definition of SDOH is necessary. Dr. Paskett commented that efforts to define SDOH could be similar to NCI efforts to define the concept of “rural” populations. After approximately one year of deliberation by a group of NCI-appointed experts, the resulting definition of rural has been accepted within the Institute.

Dr. Susan Thomas Vadaparampil recommended that the NCI publicize its innovative models for responding to emerging areas of need, including the [Multilevel Intervention Training Institute](#), the DCCPS’s [Implementation Science team](#), and the [Training Institute for Dissemination and Implementation Research in Cancer](#). Dr. Vadaparampil agreed that SDOH should be delineated and suggested that further steps to identify challenges associated with SDOH be taken by the NCI. Challenging areas might include assembling and leading Center of Excellence teams and sharing best practices related to SDOH.

Dr. Vadaparampil asked whether the landscape analysis performed by Drs. Castle and Goddard would encompass an assessment of the Ruth L. Kirschstein National Research Service Award Institutional Research Training Grants (T32 grants) focused on population science. Dr. Castle responded that he had not yet incorporated T32 grants into the analysis but agreed that these awards should be included. He noted that current efforts are focused on the NCI’s career development awards (e.g., K awards). Dr. Castle emphasized that early exposure to the field of cancer prevention would help engage more trainees and encourage more innovation in this area. In response to a question from Dr. Paskett, Dr. Castle explained that he had not yet included grant supplements (e.g., NCI Diversity Supplements) but agreed that supplements should be incorporated into the analysis.

Dr. Howard J. Fingert inquired whether the NCI’s mission to increase surveillance through such initiatives as the [Surveillance, Epidemiology, and End Results \(SEER\) Program](#) might include extramural engagement with regulatory agencies. He was impressed with [draft guidance](#) published by the U.S. Food and Drug Administration (FDA) on the design and conduct of externally controlled drug trials, which included citations of recent guidance on applying qualitative analytical approaches in epidemiology. Dr. Fingert noted that because of regulatory post-approval requirements to assess drug effects in subpopulations (especially underserved populations), industry researchers are required to have an in-depth understanding of these issues. He added that these analyses have implications for larger grants encompassing sizable clinical trials and other translational efforts. Occasionally, groups funded by such grants employ outdated analytical approaches and do not address the questions that they were funded to answer. Dr. Fingert recommended that the authors of the FDA draft guidance be invited to present on this topic at a future Subcommittee meeting.

Dr. Anna D. Barker commented on the evolution of germline sequencing and epigenomics during the past 20 years. Current techniques enable a better depth of coverage and increased ability to identify small but significant changes. She recommended that consortia efforts be engaged to scale these techniques in a way that benefits minority and underserved populations.

Dr. Spitz agreed that improved germline sequencing and epigenomic analysis should be more widely implemented. She reminded the Subcommittee about its charge to assess and bolster minority enrollment in clinical trials—specifically community trials. Dr. Paskett noted that clinical trial accrual for underserved populations (e.g., minority populations, women, people across the lifespan continuum, rural and urban populations) was listed as a recommendation in the recent report issued by the *ad hoc* Working Group on Strategic Approaches and Opportunities for Research on Cancer Among Racial and Ethnic Minorities and Underserved Populations. Dr. Paskett added that improving bidirectional communication between cancer researchers and underserved communities also was listed as a recommendation in the report. Dr. Douglas R. Lowy, former NCI Acting Director, pointed out that minority enrollment in NCI-sponsored clinical trials improved from 14 to 25 percent between 1999 and 2019. Since 2019, enrollment of minority patients has continued to increase. Dr. Lowy added that women account for approximately 60 percent of patients enrolled in NCI clinical trials. Dr. Paskett pointed out that progress in minority enrollment was not consistent across NCI-Designated Cancer Centers and further improvement still is necessary. She noted that the *ad hoc* Working Group report strongly recommended disaggregating clinical trial data related to race and ethnicity reporting.

Dr. Winkfield agreed that reporting of race and ethnicity data was a major challenge related to representation in drug discovery and cancer care. She commented that she previously had received a supplement to a Cancer Center Support Grant to strengthen NCI-Supported community outreach capacity and that this funding had supported successful engagement efforts with the public. However, Dr. Winkfield noted that she had not received any information regarding the outcomes of the funding opportunity. She recommended that supplements related to community engagement be evaluated in greater detail and their results disseminated more widely. Dr. Paskett agreed. Drawing on her experience as the assistant director of a Center of Excellence, Dr. Winkfield also advised the Subcommittee to consider how best to facilitate the translation of advances in basic biology to the field of cancer prevention.

Dr. John D. Carpten, Chair, NCAB, requested that accrual numbers be stratified into therapeutic and nontherapeutic trials to further reveal disparities among different populations. Dr. Carpten added that new Working Group efforts should be aligned with the agenda of the new NCI director and integrated across disciplines. Such resources as health data and biospecimens collected through NIH's [*All of Us Research Program*](#) should be leveraged to gain more information related to cancer control and prevention in underserved populations.

Dr. Barker observed that integrative population science approaches are not emphasized in current funding opportunities but should be supported to mitigate population-specific cancer risks.

Dr. Carpten suggested that the study of environmental carcinogens is a population-based area of focus that could be addressed by the Subcommittee. Dr. Paskett agreed. Dr. Castle informed the Subcommittee that both the DCCPS and the Division of Cancer Prevention are evaluating environmental factors and cancer risk.

Future Agenda and Action Items

Dr. Electra D. Paskett

The Subcommittee invited Drs. Castle and Goddard to present the findings of their portfolio analysis at the June 2023 Subcommittee meeting. The 30-minute presentation will be followed by a 15-minute group discussion, with additional meeting time reserved for other Subcommittee business. Dr. Paskett noted that currently it is unclear whether the June meeting will be held virtually or in person.

To avoid overlap with other NCI Subcommittees and groups, Dr. Paskett announced that she will consult with NCI colleagues to determine whether the topics suggested during the present meeting (i.e., SDOH definitions, extramural engagement with regulatory agencies on epidemiology and surveillance efforts, scaling of germline sequencing and epigenomics, clinical trial accrual, evaluation of community engagement supplements, integrated approaches to population science) are appropriate areas of focus for the Subcommittee.

Adjournment

Dr. Paskett thanked the participants for their comments and adjourned the meeting at 11:55 a.m. EST.

Dr. Electra D. Paskett
Chair

Date

Dr. Philip E. Castle
Executive Secretary

Date