U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH
NATIONAL CANCER INSTITUTE
169th NATIONAL CANCER ADVISORY BOARD

Summary of Meeting
4 September 2025

Conference Room TE406, East Wing, Shady Grove Campus
National Cancer Institute
National Institutes of Health
Bethesda, Maryland

NATIONAL CANCER ADVISORY BOARD
BETHESDA, MARYLAND
Summary of Meeting
4 September 2025

The National Cancer Advisory Board (NCAB) convened its 169th regular meeting on 4 September 2025. The meeting was open to the public on Thursday, 4 September 2025, from 9:00 a.m. to 2:00 p.m. and closed to the public from 2:00 p.m. to 4:00 p.m. The NCAB Chair, Dr. John D. Carpten, Director, Comprehensive Cancer Center, Director and Chief Science Officer, Beckman Research Institute of City of Hope, presided during both the open and closed sessions.

NCAB Members

Dr. John D. Carpten (Chair)
Ms. Margaret Anne Anderson
Dr. Nilofer S. Azad (absent)
Dr. Richard J. Boxer
Dr. Callisia N. Clarke
Ms. Ysabel Duron
Dr. Karen M. Emmons
Ms. Tamika Felder (absent)
Dr. Christopher R. Friese
Ms. Julie Papanek Grant (absent)
Dr. Amy B. Heimberger
Dr. Ana Navas-Acien
Dr. Edjah K. Nduom
Dr. Kimberly Stegmaier
Dr. Fred K. Tabung
Dr. Ashani T. Weeraratna
Dr. Karen M. Winkfield

President's Cancer Panel

Dr. Samantha L. Finstad (Executive Secretary) (absent)
Dr. Mitchel S. Berger (absent)
Dr. Carol L. Brown

Alternate *Ex Officio* NCAB Members

Dr. John Gordon, CPSC
Dr. Michelle L. Heacock, NIEHS
Dr. Michael Kelley, VA (absent)
Dr. Matthew J. Memoli, NIH (absent)
Dr. Richard Pazdur, FDA (absent)
Dr. Craig D. Shriver, DoD
Dr. Kerry Souza, NIOSH (absent)

Members, Scientific Program Leaders, National Cancer Institute, NIH

Dr. Geraldina Dominguez, Director, AIDS Malignancy Program, Office of HIV and AIDS Malignancy
Dr. Gary Ellison, Deputy Director, Division of Cancer Control and Population Sciences
Dr. Michael Espey, Deputy Associate Director, Cancer Imaging Program, Division of Cancer Treatment and Diagnosis
Dr. Nicole Senft Everson, Program Director, Health Communication and Informatics Research Branch, Behavioral Research Program, Division of Cancer Control and Population Sciences

Dr. Suzanne Forry, Program Director, Developmental Therapeutics Program, Division of Cancer Treatment and Diagnosis
Dr. Paige Green, Chief, Basic Biobehavioral and Psychological Sciences Branch, Behavioral Research Program, Division of Cancer Control and Population Sciences
Dr. Piotr Grodzinski, Chief, Nanodelivery Systems and Devices Branch, Cancer Imaging Program, Division of Cancer Treatment and Diagnosis
Dr. Brandy Heckman-Stoddard, Chief Program Officer, Breast and Gynecologic Cancer, Division of Cancer Prevention
Dr. Kirsten A. Herrick, Program Director, Risk Factor Assessment Branch, Epidemiology and Genomics Research Program, Division of Cancer Control and Population Sciences
Ms. M.K. Holohan, Director, Office of Government and Congressional Relations
Dr. Shannon Hughes, Deputy Director, Division of Cancer Biology
Dr. Fatou Jallow, Program Director, Center for Global Health
Dr. Warren A. Kibbe, Deputy Director for Data Science and Strategy
Dr. Sarah Kobrin, Chief, Health Systems and Interventions Research Branch, Healthcare Delivery Research Program, Division of Cancer Control and Population Sciences
Dr. Peter Kraft, Director, Trans-Divisional Research Program, Division of Cancer Epidemiology and Genetics
Dr. Tram Kim Lam, Chief, Environmental Epidemiology Branch, Epidemiology and Genomics Research Program, Division of Cancer Control and Population Sciences
Ms. Amber Lowery, Deputy Director for Management and Executive Officer
Dr. Douglas R. Lowy, Principal Deputy Director
Dr. Hala R. Makhlouf, Acting Chief, Pathology Investigation & Resources Branch, Division of Cancer Treatment and Diagnosis
Dr. Lori Minasian, Deputy Director, Division of Cancer Prevention
Dr. Krzysztof Ptak, Director, Office of Cancer Centers
Dr. Anu Puri, Program Director, Cancer Training Branch, Center for Cancer Training
Mr. Weston Ricks, Director, Office of Budget and Finance
Dr. Nita Seibel, Head, Pediatric Solid Tumors, Clinical Investigations Branch, Division of Cancer Treatment and Diagnosis
Dr. George Sigounas, Chief Science Advisor
Dr. Dinah S. Singer, Acting Director, Division of Extramural Activities, and Deputy Director for Scientific Strategy and Development
Dr. Shamala Srinivas, Associate Director, Scientific Review and Policy, Division of Extramural Activities
Dr. Peter Ujhazy, Deputy Associate Director, Translational Research Program, Division of Cancer Treatment and Diagnosis
Dr. Asad Umar, Chief Program Officer, Gastrointestinal and Other Cancers, Division of Cancer Prevention
Dr. Tiffany Wallace, Program Director, Center to Reduce Cancer Health Disparities
Dr. Joanna Watson, Chief, Tumor Metastasis Branch, Division of Cancer Biology
Ms. Amy Williams, Director, Office of Advocacy Relations
Ms. Crystal Wolfrey, Director, Office of Grants Administration and Chief Grants Management Officer

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THURSDAY, 4 SEPTEMBER 2025

I. CALL TO ORDER AND OPENING REMARKS—DR. JOHN D. CARPTEN

Dr. John D. Carpten called to order the 169th National Cancer Advisory Board (NCAB) meeting. He welcomed members of the Board, *ex officio* members, liaison representatives, President's Cancer Panel members, staff, and guests. Members of the public were welcomed and invited to submit to Dr. Shamala Srinivas, Associate Director, Scientific Review and Policy, Division of Extramural Activities (DEA), National Cancer Institute (NCI), in writing and within 10 days, any comments regarding items discussed during the meeting. Dr. Carpten reviewed the confidentiality and conflict-of-interest practices required of Board members in their deliberations. He also called Board members' attention to the future meeting dates listed on the agenda.

Motion. A motion to accept the minutes of the 10 June 2025 NCAB meetings was approved unanimously.

II. NIH DIRECTOR'S REMARKS—DR. JAYANTA BHATTACHARYA

Dr. Jayanta Bhattacharya, Director, NIH, welcomed NCAB members and attendees to the 169th regular meeting. He outlined his vision for NIH and reported on NIH priorities: novel alternative methods (NAMs), an NIH Gold Standard Science Plan, support for young investigators, and a new unified grant funding policy. Dr. Bhattacharya underscored the public's support for NIH's mission and commended NCI for its efforts in reducing cancer mortality over the past several decades. He underscored the importance of screening efforts and treatment advances for these successes. Dr. Bhattacharya also reflected that more progress is needed in this space.

Novel Alternative Methods. Dr. Bhattacharya explained that NIH's NAMs policy is focused on ensuring that the scientific work performed at NIH and NCI is translatable to human health. He noted that in many cases, organoids and computational methods can serve as alternative models for cancer studies. NIH-funded investigators are being directed to consider the use of NAMs that can better predict the effect of an intervention on human health before pursuing animal research. All animal studies will need to be justified accordingly. NIH is establishing a new Office of Research Innovation, Validation, and Application (ORIVA) within NIH's Office of the Director (OD). ORIVA will coordinate NIH-wide efforts to develop, validate, and scale the use of non-animal approaches across the agency's biomedical research portfolio and serve as a hub for interagency coordination and regulatory translation for public health protection.

Gold Standard Science Plan. In May 2025, President Donald Trump issued Executive Order 14303, Restoring Gold Standard Science. This order focuses on scientific integrity policies and ensures that agencies practice data transparency, acknowledge relevant scientific uncertainties, are transparent about the assumptions and likely outcomes of scenarios used, approach scientific findings objectively, and communicate scientific data accurately. All federally funded science should be reproducible, transparent, communicative of errors and uncertainties, collaborative and interdisciplinary, skeptical of findings and assumptions, structured for falsifiability of hypotheses, subject to unbiased peer review, accepting of negative results as positive outcomes, and devoid of conflicts of interest. Dr. Bhattacharya emphasized that Gold Standard Science is aligned with the current aims of the scientific community. He noted, however, that reproducibility remains a significant challenge within biomedical research, and such studies often are not viewed as trustworthy by drug development companies. NIH will work to address this issue by focusing on funding, publications, and collaboration.

Support for Young Investigators. Dr. Bhattacharya highlighted the findings from a study indicating that early career investigators are more likely to contribute new ideas within the field. He

emphasized that team-based approaches, involving both early career and more established investigators, are the most effective for encouraging new ideas in research. He also underscored the importance of supporting early career investigators so that they remain in research careers. NIH's support in this space will be critical.

New Unified Grant Funding Policy. A literature review suggests that current NIH-funded research tends to focus on ideas that are about 7–8 years old; in previous decades, NIH-funded research was focused on newer ideas. These findings suggest that NIH has reduced its share of support for funding the newest ideas. To address this gap, NIH is launching a New Unified Grant Funding Policy. This policy moves away from a strict payline-based funding model. Dr. Bhattacharya emphasized that review panels will remain a key part of NIH's funding process, functioning through the Center for Scientific Review. Going forward, however, institute and center (IC) directors will be asked to consider how applications align with their respective IC missions and strategic priorities when making funding decisions. When evaluating its IC directors, NIH will consider whether the ICs' funding portfolios are effective in advancing public health. This model will also help early career investigators succeed.

Questions and Answers

Dr. Ashani T. Weeraratna, Bloomberg Distinguished Professor of Cancer Biology, E.V. McCollum Chair of Biochemistry and Molecular Biology, Johns Hopkins Bloomberg School of Public Health, Co-Program Leader, Cancer Invasion and Metastasis, Sidney Kimmel Cancer Center, Johns Hopkins School of Medicine, requested clarification on NIH's NAMs policy. Dr. Bhattacharya stated that NIH is fully supportive of animal research in situations where no alternatives are available and as long as the animal model has been shown to be predictive of human health.

Dr. Richard J. Boxer, Clinical Professor, David Geffen School of Medicine, University of California, Los Angeles, asked how the NIH Director and NCAB can best support NCI staff who are facing budget-related challenges. Dr. Bhattacharya emphasized that Congress' support for NIH and NCI remains strong. He recommended remaining focused on the mission and the public's support for NCI. He also emphasized that the fiscal year 2026 (FY26) budget is still being determined.

Dr. Karen M. Emmons, Professor, Department of Social and Behavioral Science, Harvard T.H. Chan School of Public Health, spoke on the importance of open-minded and impartial science. She wondered how this would be affected by the executive order to impart an additional level of review on funded grants. Dr. Bhattacharya acknowledged that the NIH Director is a politically appointed position, and the Director sets priorities for the entire agency. He emphasized that he is focused on restoring public trust and ensuring that NIH's research is mission aligned.

Dr. Edjah K. Nduom, Daniel Louis Barro Endowed Chair, Professor, Department of Neurosurgery, Emory University School of Medicine, Brain Tumor Disease Leader, Winship Cancer Institute, agreed that supporting novel ideas in research is important. He pointed out that new ideas result from diverse groups. He asked how NIH will support people who are currently underrepresented in science. Dr. Bhattacharya remarked that focusing on investigators' characteristics, such as skin color, is an ineffective approach for progress in this space. He underscored the importance of focusing on new ideas and empowering early career researchers. He stated that ultimately, NIH will improve social justice by focusing on its mission.

Ms. Ysabel Duron, Founder and Executive Director, The Latino Cancer Institute, spoke on the importance of including community voices in discussions on cancer research. She expressed concerns about a loss of progress in this area and underscored the importance of evidence regarding community inclusion in cancer research, particularly regarding investigators and academic institutions. This matter is of particular concern for Latin American communities in the United States. Dr. Bhattacharya emphasized

that the recent NIH Director's priorities memo reinforces NIH's commitment to solving the Nation's health-related problems for all people and underscored the importance of engaging patients in discussions on this topic.

III. NCI PRINCIPAL DEPUTY DIRECTOR'S REPORT—DR. DOUGLAS R. LOWY

Dr. Douglas R. Lowy, Principal Deputy Director, NCI, reported on recent news and updates, progress in cancer mortality rates, and research program highlights.

Recent News and Updates. Dr. Lowy began by expressing appreciation for Dr. Paulette S. Gray, who retired from DEA in June 2025. He also recognized Dr. Dinah S. Singer, Acting Director, DEA, NCI, and NCI Deputy Director for Scientific Strategy and Development; Dr. Srinivas; and Ms. Crystal Wolfrey, Director, Office of Grants Administration and Chief Grants Management Officer, NCI, for their contributions to NCI. Dr. Lowy also presented an overview of NCI's new *ad hoc* Working Group on Extramural Research Concepts and Programs, and he noted that the working group will likely be positioned to consider new program announcements with special receipt, referral, and/or review considerations (PARs) by December 2025.

Progress in Cancer Mortality Rates. Dr. Lowy shared data showing that cancer mortality rates have declined by more than one-third for both men and women during the past 30 years. He also highlighted data from NCI's Surveillance, Epidemiology, and End Results (SEER)*Explorer showing the differences in cancer mortality rates between urban and rural populations. Disparities between these groups have increased in recent years, likely due to key lifestyle factors (e.g., access to health care). Racial and ethnic disparities also must be considered when understanding cancer mortality. NCI strives to improve cancer mortality rates by better understanding how cancer develops, including the roles of specific genes and the immune system; improving screening; and developing life-saving interventions. Dr. Lowy underscored the importance of fundamental research in this space. NCI will work to increase the uptake of the current standard of care for cancer prevention, screening, and treatment while also enabling progress in new standards of care via research that advances the community's overall understanding and impact.

Research Program Highlights. NCI's Community Oncology Research Program (NCORP) offers the potential to narrow gaps between rural and urban populations. NCORP has recruited many patients from underrepresented groups, including rural populations. Dr. Lowy shared a recent paper examining opportunities in this space. He also pointed to the ATOMIC (Adjuvant Trial of Deficient Mismatch Repair in Colon Cancer) trial, which helped improve survival for stage 3 colon cancer, as a successful example of NCORP's impact. Dr. Lowy recognized Dr. LeeAnn Bailey, Chief, Integrated Networks Branch, Center to Reduce Cancer Health Disparities (CRCHD), NCI, and head of NCI's Early Onset Cancer Initiative, for championing work that addresses early onset cancers. NCI is currently supporting supplemental applications for work focused on key cancer types (e.g., colorectal, breast, pancreatic, endometrial). Dr. Lowy highlighted a recent paper by Dr. Meredith Shiels, Senior Investigator, Infections and Immunoepidemiology Branch, Division of Cancer Epidemiology and Genetics (DCEG), NCI, that examined trends in cancer incidence and mortality rates in early onset and older-onset age groups. Dr. Lowy also noted that NCI is conducting a self-evaluation and is developing a strategic plan; more information will be presented at the December 2025 NCAB meeting.

Questions and Answers

Dr. Christopher R. Friese, Vice Provost, Academic and Faculty Affairs, Elizabeth Tone Hosmer Professor of Nursing, Professor of Health Management and Policy, Associate Director, Cancer Control and Population Sciences, Rogel Cancer Center, University of Michigan, requested an update on the current NCI workforce. Dr. Lowy noted that several staff from NCI's Office of Grants Administration

and Office of Management were lost due to voluntary and involuntary separation. Overall, NCI's workforce has been reduced by 10 percent. He noted that NCI's self-evaluation is focused on identifying the resulting deficits and possible solutions to them (e.g., cross-training, assignments). Limitations on hiring within the federal government also are still in place.

Dr. Ana Navas-Acien, Professor of Environmental Health Sciences, Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, noted that cancer mortality rates are higher in Tribal communities, potentially reflecting gaps between urban and rural populations. Environmental factors likely contribute to these disparities. Dr. Lowy agreed on the challenges of this matter. He noted that he has discussed these challenges with Tribal communities and underscored the importance of further work in this space.

Ms. Duron added that environmental factors also contribute to cancer mortality rates among Latin American communities. She asked about support for research in this space. Dr. Lowy agreed on the importance of this issue but noted the need to prioritize within the limits of the NCI budget.

IV. BUDGET UPDATE—DR. DOUGLAS R. LOWY AND MR. WESTON RICKS

Dr. Lowy and Mr. Weston Ricks, Director, Office of Budget and Finance, NCI, presented an update on NCI's budget. Mr. Ricks began by reminding the NCAB members of NCI's oversight bodies, duties, and authorities, highlighting the institute's position within the federal government. He noted that NCI often operates under a continuing resolution (CR), which presents challenges for the institute. Currently, the budgets for FY26 and FY27 are largely unknown. NCI's existing infrastructure is key for ensuring that NCI continues to make progress during times of uncertainty.

Mr. Ricks noted that NCI's Annual Professional Judgment Budget, also known as the bypass budget, is an aspirational document that acknowledges current needs and capabilities in cancer research. He provided a brief overview of NCI's federal budget process, which involves input from the administration and Congress. The bypass budget was released in September 2024, and the President's budget request was released in May 2025. The congressional justification was released in June 2025, and the Senate and House markups occurred in July and September 2025, respectively. Mr. Ricks noted that NCI is currently operating under a CR.

NCI is currently discussing its priorities, as well as approaches to remain agile during periods of funding uncertainty. Mr. Ricks highlighted annual budget changes and noted that the budget has been tailored to accommodate new administrative priorities. Restructuring at NIH has been proposed to improve the agency's efficiency. The Trump administration is requesting $27.5 billion (B) for NIH and $4.5 B for NCI. Indirect costs would be capped at 15 percent. The House bill proposes $47.2 B for NIH and $7.37 B for NCI and retains NIH's 27 ICs. The Senate bill proposes $47.4 B for NIH and $7.37 B for NCI and prohibits restructuring and indirect cost rate changes without Senate collaboration.

Dr. Lowy discussed the research project grant (RPG) pool and NCI's funding priorities. He explained that NCI's applicant pool has increased in recent years and to a greater extent than the applicants for NIH overall. The percentage of modular awards has decreased progressively since 2012 as the costs of conducting research have increased over time. Dr. Lowy spoke on the importance of balancing the number of awards with the award amounts. He shared data showing how NCI's paylines have changed over time. Next, Dr. Lowy listed examples of challenging considerations related to prioritization. Priority-related considerations include balancing support for new standards of care versus efforts to increase uptake of current standards of care, maintaining the RPG pool, supporting training and community engagement, and supporting research focused on cancer disparities.

Questions and Answers

NCAB Chair Dr. Carpten asked about current payline projections. Dr. Lowy explained that these predictions have been affected by the new requirement to ensure that at least 50 percent of the RPG pool includes multiyear funding. Mr. Ricks noted that NCI will formulate a plan in alignment with the NIH Director's priorities memo. He commented that uncertainty at this point in the fiscal year is not unusual; more information will be forthcoming in the following weeks.

Dr. Weeraratna inquired about concerns regarding the potential pocket rescissions that may occur downstream, as well as the rate at which the current CR may be reduced. Mr. Ricks suggested reviewing public statements on this matter, as discussions are ongoing. NCI is preparing to pivot in response to multiple funding scenarios to fund as many grants as possible.

Dr. Callisia N. Clarke, Chief, Division of Surgical Oncology, Associate Professor of Surgery, Department of Surgery, Medical College of Wisconsin, requested clarification regarding potential restructuring of NIH ICs. She noted concerns regarding the effects of restructuring on the health outcomes of underrepresented populations. Dr. Lowy stated that one of NCI's priorities is supporting and disseminating research that transforms standards of care. Dissemination to underrepresented groups is included in this effort.

NCAB Chair Dr. Carpten asked about NCI's plans to invest in cancer prevention and population health research in the future. Dr. Lowy emphasized that this prioritization is still in progress. He envisions that NCI will identify key priority areas that currently are underfunded and make efforts to balance priorities as needed.

Ms. Duron expressed concern regarding the future of the National Institute of Environmental Health Sciences (NIEHS) and National Institute on Minority Health and Health Disparities (NIMHD). Dr. Lowy commented that to his understanding, the initial proposal for consolidating the NIH ICs is no longer being seriously considered for FY26. Thus, he believes that funding for NIEHS and NIMHD would continue. Mr. Ricks added that discussions on this matter are ongoing in Congress, and support for NCI remains strong.

V. RFA/COOP. AGR./SINGLE SOURCE CONCEPTS—RE-ISSUE—NCI PROGRAM STAFF

Division of Cancer Biology

Metastasis Research Network (MetNet) (Re-issue RFA/Coop. Agr./U54)—Dr. Joanna Watson

Dr. Joanna Watson, Chief, Tumor Metastasis Branch, Division of Cancer Biology (DCB), NCI, presented a re-issue concept for the Metastasis Research Network (MetNet). She explained that metastasis accounts for substantial numbers of cancer-related deaths, and more work is needed to identify ways to understand, treat, and prevent metastasis. Despite years of research, many challenges on this topic remain. Metastasis is a dynamic, nonlinear process, occurring much earlier than originally thought and often before diagnosis of the primary tumor. More work is needed to develop a comprehensive understanding of this process.

To address these challenges, the MetNet request for applications (RFA) for U54 research centers was released in 2020. This program sought to promote the integration of whole-body and systems biology approaches to generate a cohesive understanding of metastasis that accounts for its dynamic, nonlinear, multiscale emergent nature via collaborative and multidisciplinary basic research. A total of 38 applications were received, of which 5 were funded. Dr. Watson explained that the U54 teams are

integrated by shared tissue biology, biological processes, and specific research themes. MetNet also includes U01 research projects, and the entire network is supported by a Multi-Consortia Coordinating Center. She noted that the current re-issue concept considers only the U54 component.

Dr. Watson emphasized that MetNet has made excellent progress since its initiation. This is reflected in its publications, public presentations of data, new collaborations resulting in the submission of an application, and datasets that are deposited into distinct public repositories. MetNet investigators have initiated collaborations across and beyond the network. Dr. Watson remarked that MetNet has brought together investigators who might not otherwise collaborate, resulting in synergy and progress in the field. She highlighted examples of successful efforts in this space: (1) applying advanced computational approaches to the gut–immune niches in colorectal metastasis and (2) identifying clinically relevant similarities in brain-specific metastasis from large patient cohorts with melanoma and breast cancer.

MetNet research findings in breast cancer have spanned the metastatic cascade, with studies in invasion, early dissemination, colonization, tumor microenvironment crosstalk, therapy, and advocacy. Dr. Watson highlighted two recent MetNet publications that use systems approaches across biological scales: (1) an assessment of genomic architecture and the composition of the tumor microenvironment, which found that breast cancers fall along a continuum constrained by three dominant genomic archetypes, and (2) an effort to better understand the dynamics underlying poor prognosis, increased innovation, and metastasis.

DCB sought an independent review to determine whether a re-issuance is warranted for this program. The team established an evaluation process and contacted five external experts, none of whom had any prior or ongoing relationship with MetNet but who had expertise in metastasis systems biology and experience with large programs. The experts had access to MetNet materials and activities, such as the annual investigator meeting and pilot project poster session, as well as all qualitative and quantitative evaluation materials. The experts expressed strong support for the program and recommended that the program continue through the U54 mechanism. No specific changes were required, but the experts made recommendations regarding data reuse, collaborative and pilot project opportunities, expanding the scientific themes, and increasing the program's overall visibility.

Dr. Watson emphasized that providing dedicated set-aside funds indicates NIH's and NCI's commitment to supporting multidisciplinary efforts to use systems-level approaches to address gaps and challenges in metastasis research that could not be accomplished via individual research projects. The team believes that re-issuing the RFA would maximize NCI's investment in promoting collaborative opportunities and energizing the metastasis community. The RFA would continue to use the cooperative agreement mechanism, which would permit substantial NCI programmatic involvement and would aid and foster interactions and collaborations across and beyond the network.

Subcommittee Review. Dr. Weeraratna pointed out that MetNet is the only NCI-funded program with a sole focus on the biology of metastasis. She underscored the importance of this effort and expressed the Subcommittee's support for the program's progress and outcomes for human health.

The proposed annual budget is $6.8 million (M), totaling about $1.7 M annually in total costs per award. The program would retain the previous administrative requirements of specifying a data manager and involving advocates and would require that up to $100,000 be set aside annually for collaborative projects.

Questions and Answers

Dr. Boxer asked whether artificial intelligence (AI) technologies would be considered for the program in the future. Dr. Watson stated that several MetNet teams are using AI approaches in their current work, and AI could be further emphasized in the future.

NCAB Chair Dr. Carpten inquired about the percentage of effort on pediatric cancers. Dr. Watson explained that currently, none of the teams are focused on this topic. However, pediatric cancers could be emphasized in the future. Dr. Kimberly Stegmaier, Professor of Pediatrics, Harvard Medical School, Ted Williams Investigator, Dana-Farber Cancer Institute, Vice Chair of Research, Pediatric Oncology, Co-Director, Pediatric Hematologic Malignancies Program, Dana-Farber/Children's Hospital Cancer Center, Institute Member, Broad Institute of Harvard and MIT, agreed on the importance of this topic.

Dr. Clarke asked whether the cohort included patients with rare tumors. Dr. Watson noted that one of the teams is examining brain metastasis from all sources and has compiled a tissue bank that includes rare cancers. Dr. Weeraratna added that all these projects are generating data in the public domain, which will ultimately inform scientific advancements in other areas.

Motion. A motion to concur on DCB's Re-issue RFA/Cooperative Agreement (Coop. Agr.)/U54 entitled "Metastasis Research Network (MetNet)" was approved unanimously.

Division of Cancer Control and Population Sciences

Carcinogen Hazard Assessment Monographs Program (CHAMP) (Re-issue RFA/R01)— Dr. Tram Kim Lam

Dr. Tram Kim Lam, Chief, Environmental Epidemiology Branch, Division of Cancer Control and Population Sciences (DCCPS), NCI, presented a re-issue concept for the Carcinogen Hazard Assessment Monographs Program (CHAMP), formerly the International Agency for Research on Cancer Monographs Program. She explained that hazard identification of potential carcinogens in humans is vitally important for cancer research. This program has been partly funded by NCI since 1982. Dr. Lam noted that CHAMP aligns with the missions of multiple NCI divisions and centers.

Established in 1971, the program is known as the Encyclopedia of Carcinogens and is used by multiple agencies across the world. The program evaluates carcinogenic hazards based on a systematic review of multiple evidence streams, leveraging both domestic and international experts across multiple disciplines. It focuses on chemical agents, biological agents, and environmental and lifestyle factors. The monographs are based on a broad stream of evidence, including human population, animal, and mechanistic studies.

Dr. Lam stated that the monographs have earned the trust of both scientific and lay communities. The program has been leveraged to guide research priorities, evidence-based regulations, and health policies. To date, more than 1,000 agents have been evaluated. These efforts have led to significant impacts for cancer control and prevention. The methodology used by the program has served as a model for many agencies.

The overarching goal of the re-issuance is to identify preventable causes of cancer; conduct authoritative, rigorous, and transparent evaluation of suspected carcinogens by a broad group of multidisciplinary experts; and disseminate results widely and freely via publications in peer-reviewed journals and through other media outlets to ensure broad public understanding and access. The team is requesting an open RFA, as opposed to the limited competition in the current RFA. Dr. Lam stated that

open competitions will expand the applicant pool while maintaining NCI's commitment to scientific rigor, transparency, and innovation.

In preparation of this re-issuance, the team organized an external evaluation of the RFA. The evaluators unanimously supported the initiative. They recommended several areas of improvement, including expanding the number of working groups annually to meet the critical needs to leverage technology (e.g., AI) to curate the evidence and improve efficiency for the evaluation process. They also recommended enhancing communication to ensure timely access of evaluations and public awareness. The program recommends an R01 mechanism that aligns with the stewardship of the award.

Subcommittee Review. Dr. Emmons expressed the review team's support for the program, which is a core component of cancer prevention activities in the United States. She noted that the structure of this program allows the evaluation of a wide range of agents in a broad context. She commended the program for considering new technologies and expressed support for the open competition. The review team's greatest concern was related to the budget reduction and the impact on cancer prevention efforts in the United States.

The requested annual budget totals $1 M for 5 years; an annual budget of $700,000 was approved.

Questions and Answers

Dr. Fred K. Tabung, Associate Professor, Division of Medical Oncology, Department of Internal Medicine, The Ohio State University Comprehensive Cancer Center, James College of Medicine, The Ohio State University Wexner Medical Center, requested additional details on the process of shortlisting the potential carcinogens for evaluation and the process of bringing the evidence to conclusion. Dr. Lam explained that the working groups include more than 20 experts who evaluate the stream of evidence through a consensus basis. She emphasized that the approach is rigorous and transparent, setting a standard for other agencies.

Dr. Tabung also asked whether the program has reached out to potential partners, such as the World Cancer Research Fund. Dr. Lam affirmed that the program has reached out to several partners, including NIEHS, the American Cancer Society, and the International Agency for Research on Cancer. She added that NCI's support constitutes a portion of the total cost of bringing this program forward and would likely support one or two working groups. She agreed on the value of complementary partnerships.

Dr. Friese underscored the program's importance and impact. He wondered about opportunities for partnerships with the National Library of Medicine or other health science librarians and informaticians. Dr. Lam agreed on the value of such partnerships to augment processes and increase efficiency.

Ms. Duron asked whether the CHAMP researchers are being encouraged to work within the affected communities and better understand the factors surrounding their environments. Dr. Lam agreed on the importance of this point. She stated that the current awards invite public comments to highlight agents or exposures of high importance. This point could be emphasized in the new notice of funding opportunity (NOFO).

NCAB Chair Dr. Carpten asked whether the CHAMP studies involve the use of animal models. Dr. Lam explained that the program involves multiple evidence streams that include human, animal, and mechanistic studies. Using this approach, the program has built a trusted, authoritative reputation over the years. Dr. Carpten suggested considering alternative models that could be used in the future, if appropriate.

Motion. A motion to concur on DCCPS' Re-issue RFA/R01 entitled "Carcinogen Hazard Assessment Monographs Program (CHAMP)" was approved unanimously.

Division of Cancer Treatment and Diagnosis

Biospecimen Banks to Support NCI NCTN and EET Clinical Trials (Re-issue RFA/Coop. Agr./U24/Single Source)—Dr. Hala R. Makhlouf

Dr. Hala R. Makhlouf, Acting Chief, Pathology Investigation & Resources Branch, Division of Cancer Treatment and Diagnosis (DCTD), NCI, presented a re-issue concept for biospecimen banks to support the NCI National Clinical Trials Network (NCTN) and Early-Phase and Experimental Clinical Trials (EET). Currently, two RFAs support five NCTN biobanks and an EET biobank through U24 grants. Together, these programs provide national infrastructure for receiving, processing, storing, and distributing high-quality clinical annotated biospecimens. Looking ahead, the new RFA issuance will ensure that these resources remain robust and sustainable to broaden investigator access, support translational cancer research, and improve patient outcomes. The re-issuance will also strengthen the information technology systems; support more complex, specialized processing; and expand digital pathology with image collection and data to support AI-driven prediction and prognostic model-based research and applications.

Currently, the NCTN biobanks support four adult groups and one pediatric group. The banks work closely with the groups, NCI staff, and each other. The network is centrally coordinated and is integrated with data management centers, operating centers, and trial sites nationwide. Oversight of the biobanks is provided by the Group Banking Steering Committee and its four subcommittees together with patient advocates to ensure coordination, harmonization, and continuous improvement.

Dr. Makhlouf explained that the biospecimens are derived from all organ sites, including solid tumors and hematologic malignancies. Collection of samples is protocol driven. The specimens are used by NCTN investigators for integral and integrated biomarker studies, which are essential for primary endpoint trial analyses. Once the clinical trial requirements are met, any remaining materials become legacy specimens and are made available to qualified investigators for secondary correlative studies. Access to these specimens is contingent upon approval based on scientific merit by the NCTN Core Correlative Science Committee.

Any investigator within or outside the group can request access to legacy specimens through NCTN Navigator, which was launched in 2018. Navigator consolidates inventories from completed trials with clinical data and reported primary outcomes. Investigators begin by exploring available specimens and submitting a letter of intent and feasibility review, followed by a proposal and scientific merit review. Navigator's goal is to provide transparent access for the research community, offering a single front-door service for investigators while maximizing the use of the resources, avoiding duplication, and tracking applications.

Since the launch of Navigator, 351 letters of intent have been submitted. About 70 percent were considered feasible, and 67 percent of reviewed proposals were approved. Dr. Makhlouf noted that validation studies are prioritized, and exploratory work is approved only under specific conditions. Between 2018 and 2023, the NCTN banks distributed hundreds of thousands of specimens and supported more than 250 investigators for integrated biomarker studies and more than 300 investigators using legacy specimens. The banks also generated more than 150,000 digital pathology images, with distribution nearly doubling during the past 2 years. Altogether, these resources have supported more than 600 publications, many of which were published in high-impact-factor journals.

The EET biobank was established in 2020 and supports the Experimental Therapeutics Clinical Trials Network, as well as other NCI initiatives. Unlike the NCTN biobanks, the EET biobank bridges basic science and clinical application. The network is supported by the National Clinical Laboratory Network, which performs molecular characterization across patient specimens. All specimen data are tracked through the Medidata Rave system. The EET biobank connects with the NCI Oncology Automated Reporting System, which compiles dashboards and integrates data into the biospecimen roadmap. The EET biobank collects a variety of specimens in real time at multiple time points via standard operating procedures (SOPs) and kits. Dr. Makhlouf emphasized that EET's support for multiple clinical trials and investigators has enabled extensive biomarker and biopsy research.

The new RFA will expand support for the essential functions of NCTN and EET, including infrastructure and operations, informatics and data management, cancer prevention, biospecimens and banking, and specialized blood and specimen processing. Enhanced activities would include digital pathology imaging support, specialized kits and specimen processing, data sharing, information technology capabilities, and clinical trial sequencing. Dr. Makhlouf concluded by stating that the biobanks have been running successfully for years. Each bank has strong infrastructure with close ties to its trial group and well-curated collections that support landmark studies, high-impact publications, and major NCI initiatives.

The program underwent an external review, which yielded a consensus on the program's high value for translational clinical research and impact on medical practice. Reviewers underscored the uniqueness of the trial specimens, the use of harmonized banking and SOPs, and transparent access through Navigator and the front-door service. They emphasized the necessity for continued support and expansion of the biobank to ensure biospecimen availability and facilitate new treatment development. They recommended expanding digital pathology capabilities and linking specimens to other data, such as genomic and biologic assay results.

Subcommittee Review. Dr. Karen M. Winkfield, Executive Director, Meharry-Vanderbilt Alliance, Ingram Professor of Cancer Research, Professor of Radiation Oncology, Vanderbilt University School of Medicine, underscored the importance of this resource for leveraging cooperative groups to expand impact beyond clinical trials. Most of the reviewers' questions related to the logistics and metrics of the resource. She noted that these questions have been addressed satisfactorily. Dr. Winkfield emphasized that the expansion into the digital pathology space will become increasingly important as AI becomes more integral to research. However, the decreased funding will have an impact on image storage and capture.

The 6-year total proposed budgets are $101.28 M and $12.78 M for NCTN and EET, respectively. These funds would support five NCTN awards and one EET award.

Questions and Answers

Dr. Tabung agreed on the importance of this resource. He wondered about the possibility of linking to other biologic data types, such as genomics and environmental factors. He underscored the importance of linking population science to cancer biology. Dr. Makhlouf clarified that specimens are collected from the trial groups, and the resource has no control over the type of data collected. She added that general clinical data (e.g., diagnosis, pathology, age, gender) are linked to the samples. NCAB Chair Dr. Carpten noted that the collected data reflects the initial study design, and many electronic medical systems include modules for other types of data.

Motion. A motion to concur on DCTD's Re-issue RFA/Coop. Agr./U24/Single Source entitled "Biospecimen Banks to Support NCI NCTN and EET Clinical Trials" was approved unanimously.

Division of Cancer Treatment and Diagnosis

Glioblastoma Therapeutics Network (GTN) (Re-issue RFA/Coop. Agr./U19)—Dr. Suzanne Forry

Dr. Suzanne Forry, Program Director, Developmental Therapeutics Program, DCTD, NCI, presented a re-issue concept for GTN. She explained that GTN arose initially from a working group that was convened by the NCI Clinical Trials Advisory Committee, which had recommended establishing a national infrastructure to enhance support for discovery and development of adult glioblastoma therapies. The goal of GTN is to improve the treatment of adult glioblastoma by developing a pipeline of novel, effective agents that address known challenges in glioblastoma and testing them in the clinic.

The program currently funds five multi-institutional centers through the U19 mechanism. Each center supports up to three projects and includes cores to support the projects, as well as an administrative core. Collaborative pilot projects have been established among centers. Furthermore, a network coordination center and steering committee have been established. Dr. Forry briefly highlighted program outcomes, which include preclinical findings and advancements to clinical trials. She affirmed that the program has achieved its goal of moving novel agents into the clinic, as well as studying agents at length at the preclinical level.

Reviewers stated that GTN remains critical to advancing translational glioblastoma research, encompassing areas that are not generally addressed by industry or philanthropy. The reviewers asked GTN to retain the requirements for pharmacodynamics as a core feature in clinical and preclinical settings. Dr. Forry emphasized that these efforts will set a standard for rigor in translational studies. The reviewers also expressed concern that the administrative budget was too high, and they recommended diverting more of the funds toward the research activities. It was noted that having a central coordinating center can be complicated when centrally coordinating clinical trials across multiple sites. The reviewers also recommended expanding program outreach.

Going forward, the program would maintain its focus on preclinical to clinical agents, with a sustained emphasis on pharmacodynamics and crossing the blood–brain barrier. The network would maintain multi-institutional teams from geographically different areas to increase catchment for clinical trials. The U19 mechanism will be used, and the centers would be limited to two projects to align with budgetary constraints. Administrative and scientific coordination would be housed within each U19 center. The collaborative pilot projects would continue with greater multi-year flexibility. New efforts would include invoking associate members and focusing on ways to expand the GTN. Dr. Forry also highlighted a recent paper resulting from a collaboration between two U19 centers; the study was focused on transporting drugs into the blood–brain barrier through ultrasound and microbubbles and measuring drug concentrations with an intrathecal catheter.

Dr. Forry concluded by emphasizing the network's unique attributes, noting that this resource has successfully transitioned novel therapeutic agents for adult glioblastoma from late preclinical to early clinical studies. In the re-issued RFA, the team will continue its focus in this area and expand efforts in community team science, with potential to further develop this pipeline for new therapies for glioblastoma.

Subcommittee Review. Dr. Nduom expressed support for the re-issue concept and noted that the reviewer comments have been addressed. He underscored the value of this resource for glioblastoma research, which remains a critical topic in cancer research, and spoke on the importance of investments in this space.

The 5-year total proposed budget is $21.8 M for three or four awards.

Questions and Answers

Dr. Friese inquired about drug-repurposing opportunities in this space. Dr. Forry noted that troriluzole is being tested for efficacy against adult glioblastoma.

Dr. Stegmeier asked about considerations for children and adolescents with glioblastoma. Dr. Forry agreed on the importance of this point and noted that a seminar program could be launched to engage the pediatric research community.

Dr. Carol L. Brown, Nicholls-Biondi Chair for Health Equity, Memorial Sloan Kettering Cancer Center, asked whether the drugs are developed institutionally or via industry partnerships. Dr. Forry clarified that industry partnerships have been established, and these partnerships would continue through the new initiative. She noted that such partnerships offer unique opportunities and challenges.

Motion. A motion to concur on DCTD's Re-issue RFA/Coop. Agr./U19 entitled "Glioblastoma Therapeutics Network (GTN)" was approved with 10 ayes, 0 nays, and 1 abstention.

Division of Cancer Treatment and Diagnosis

Childhood Cancer Survivor Study (CCSS) (Re-issue RFA/Coop. Agr./U24/Single Source)— Dr. Nita Seibel

Dr. Nita Seibel, Head, Pediatric Solid Tumors, Clinical Investigations Branch, DCTD, presented a re-issue concept for CCSS. She explained that treatment advances over the past five decades have improved survival rates for childhood and adolescent cancer. Investigating long-term treatment-associated morbidity and mortality has been hindered by small sample size, limited follow-up, and individualized institutional efforts. The CCSS started in 1994, first under a U01-funded mechanism before changing to a U24-funded mechanism, to address these challenges. The CCSS provides researchers with access to a retrospective cohort of patients from 1970 to 1999. The cohort includes 25,735 survivors of pediatric and adolescent cancer and 5,031 sibling controls.

More than 1,300 investigators, including 100 early career researchers, have utilized this U24-funded resource. At least 75 investigator-initiated studies, totaling more than $90 M in investigator-initiated grants, have been funded. From these studies, 485 publications have been published. Dr. Seibel highlighted key findings from a recent CCSS study. Approximately 20 percent of the general population develops an age-related health condition by age 65. Childhood cancer survivors develop an age-related health condition 18 years earlier than the general population, by the age of 47. About 55 percent of childhood cancer survivors will develop at least one age-related health condition by the age of 65.

CCSS findings inform late-effect guidelines created by the Children's Oncology Group and International Guideline Harmonization Group. CCSS is a resource for genetic research. Sequencing has been completed for more than 10,000 childhood cancer survivors. Funded by the Childhood Cancer Survivorship, Treatment, Access, and Research (STAR) Act, methylation array and clonal hematopoiesis of indeterminate prognosis have been completed for specific patient subgroups. The data are accessible to researchers through the database of Genotypes and Phenotypes (dbGaP) and St. Jude Cloud. CCSS has led to 13 intervention studies, of which 8 are currently active. Using CCSS, investigators have created clinical calculators for point-of-care risk assessment for numerous chronic diseases, including heart failure, kidney failure, stroke and myocardial infarction, acute ovarian failure and ovarian insufficiency, and subsequent breast cancer.

Dr. Seibel discussed changes in childhood cancer treatment and care. Between 1970 and 1999, 2D radiation therapy was the common treatment. Current treatments use 3D conformal radiation therapy,

intensity-modulated radiation therapy, or proton beam. Diagnosis has changed with improved risk stratification and de-escalation of therapy intensity. Novel therapies, including targeted therapies, immunotherapy, and CAR T cells, have been incorporated into treatments. Along with this, demographic representation has changed.

Using the current cohort, this initiative would uncover mechanisms involved in aging to serve as a basis for additional intervention studies to mitigate age-related conditions, characterize the impact of treatments on brain health and neurocognitive function, continue to collect DNA samples and complete analyses to identify genetic predispositions for late effects, conduct longitudinal evaluation of behavioral and psychosocial outcomes in aging survivors, and facilitate interventions to evaluate the effectiveness of preventing late effects and improving survivorship care. Using STAR Act funding, this initiative will expand the cohort to children diagnosed and treated between 2000 and 2025. The expanded cohort will identify the prevalence and risk factors for long-term outcomes for cancer and current cancer therapies. Expansion of the cohort will establish a resource that reflects the current population demographics. Investigators can use the expanded cohort resource for evidence-based guidelines and genetic, biomarker, and intervention studies.

The CCSS NOFO will require investigators to describe their plan to recruit an expansion cohort and how the research design emphasizes changes in radiation, use of novel therapies, and current demographics. Dr. Seibel highlighted that it is not too early to expand the CCSS cohort because of the difficulty in finding and recruiting pediatric survivors and because identifying early signs for late effects caused by novel therapies has a 5- to 10-year window of survivorship. The median age of survivors in the CCSS is 44. Dr. Seibel emphasized that these survivors are at the age in which the general population begins to develop age-related health conditions, so it is important to continue these initiatives. Dr. Seibel continued that CCSS is a key platform for novel discovery, intervention trials, and evidence-based guidelines.

Subcommittee Review. Dr. Stegmaier commented that the reviewers unanimously endorse the CCSS concept. She highlighted that the CCSS cohort is the largest in the world for this research area, and it is imperative that the resource continues. Dr. Stegmaier provided personal testimony on how her care and treatment of pediatric cancer patients is informed by the guidelines developed from the CCSS cohort. She also discussed the written testimony from reviewers external to the NCAB.

The proposed budget to maintain and enhance the current cohort of this U24-funded resource is $1.95 M in direct costs each year for 5 years. The estimated cost for expansion of the cohort is $3 M in direct costs each year, which will be funded by the STAR Act.

Questions and Answers

Ms. Duron highlighted that inclusion of families in this initiative is important to ensure they understand that follow-up care is vital for monitoring long-term effects and to reduce pediatric patients being stigmatized by the disease. Dr. Seibel explained that the CCSS resource can be used for interventions with these subgroups of pediatric cancer survivors. She continued that DCCPS has funded several studies to analyze the psychosocial factors of survivorship. Ms. Duron commented that patient advocates and community-based organizations need to be present when developing and discussing these concepts. Dr. Seibel noted that childhood cancer survivors and patient advocates are included on the CCSS Advisory Board.

Motion. A motion to concur on DCTD's Re-issue RFA/Coop. Agr./U24/Single Source entitled "Childhood Cancer Survivor Study (CCSS)" was approved unanimously.

VI. PROGRAM ANNOUNCEMENT WITH SPECIAL RECEIPT, REFERRAL AND/OR REVIEW (PAR) (EN BLOC)—DR. SHAMALA SRINIVAS

Dr. Srinivas provided an overview of the 11 PARs (18 NOFOs) under review for re-issuance. She highlighted the primary NCI divisions, NOFO numbers and titles, numbers of previous re-issuances, and the current numbers of awards granted under the NOFO.

- Mechanistic Links Between Diet, Lipid Metabolism, and Tumor Growth and Progression
  - (UH2 Clinical Trial Not Allowed) (PAR 25-118)
  - (U01 Clinical Trial Not Allowed) (PAR-25-119)
- Understanding Expectancies in Cancer Symptom Management
  - (R01 Clinical Trial Required) (PAR-25-254)
- Pancreatic Cancer Detection Consortium: Research Units
  - (U01 Clinical Trial Optional) (PAR-21-334)
  - (U24 Clinical Trial Not Allowed) (PAR-21-335)
- Precision Approaches in Radiation Synthetic Combinations (PAIRS)
  - (R01 Clinical Trial Optional) (PAR-22-198)
  - (R21 Clinical Trial Optional) (PAR-22-199)
- Assay Validation of High-Quality Markers for Clinical Studies in Cancer
  - (UH2/UH3 Clinical Trial Not Allowed) (PAR-25-074)
  - (UH3 Clinical Trial Not Allowed) (PAR-25-075)
- Innovative Research in Cancer Nanotechnology (IRCN)
  - (R01 Clinical Trial Not Allowed) (PAR-25-106)
- Microbial-based Cancer Imaging and Therapy—Bugs as Drugs
  - (R01 Clinical Trial Not Allowed) (PAR-22-085)
  - (R21 Clinical Trial Not Allowed) (PAR-22-086)
- Bioengineering Research Grants (BRG)
  - (R01 Clinical Trial Not Allowed) (PAR-22-242)
  - (R01 Clinical Trial Optional) (PAR-22-243)
- Systematic Testing of Radionuclides in Preclinical Experiments (STRIPE)
  - (R01 Clinical Trial Not Allowed) (PAR-22-139)
  - (R21 Clinical Trial Not Allowed) (PAR-22-140)
- NCI Clinical and Translational Exploratory/Developmental Studies
  - (R21 Clinical Trial Optional) (PAR-25-139)
- Specialized Programs of Research Excellence (SPOREs) in Human Cancers for Years 2024, 2025, and 2026
  - (P50 Clinical Trial Required) (PAR-23-284)

Motion. A motion to concur on DEA's 11 PAR re-issuances was approved unanimously.

VII. ONGOING AND NEW BUSINESS—DR. JOHN D. CARPTEN

Future Agenda Items. Members suggested discussing AI technologies for cancer research; NCI's training activities; demographics data on the NCI-funded scientific workforce for FY25; updates from NCAB subcommittees, including the Subcommittee on Cancer Centers; information on the status of NCI Frederick; the ratio of NCI RFAs to investigator-initiated research projects, potentially compared with other NIH ICOs; new guidelines for NCI-designated Cancer Centers; and centralization of

communication activities at NIH. NCAB members were asked to forward any further suggestions for future agenda items to Drs. Carpten and Srinivas.

Informational Items. Dr. Weeraratna inquired about the status of selecting a new NCI Director. Dr. Lowy responded that he will continue to serve in this role until an NCI Director is presidentially appointed.

VIII. ADJOURNMENT OF OPEN SESSION—DR. JOHN D. CARPTEN

Dr. Carpten adjourned the open session. Only Board members and designated NCI staff remained for the closed session.

IX. CLOSED SESSION—DR. JOHN D. CARPTEN

"This portion of the meeting was closed to the public in accordance with the provisions set forth in Sections 552b(c)(4), 552b(c)(6), Title 5 U.S. code, and 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. appendix 2)."

There was a review of grants and a discussion of personnel and proprietary issues. Members absented themselves from the meeting during discussions for which there was potential conflict of interest, real or apparent.

The Board was informed that a comprehensive listing of all grant applications to be included in the **en bloc** vote was in the Special Actions package. Those grant applications, as well as those announced during the closed session, could be considered for funding by the Institute.

The NCAB **en bloc** motion to concur with IRG recommendations was unanimously approved. During the closed session, a total of ___ NCI applications were reviewed requesting direct cost support of ___ requesting direct cost support of __.

X. ADJOURNMENT—DR. JOHN D. CARPTEN

Dr. Carpten thanked all the Board members, as well as the visitors and observers, for attending. There being no further business, the 169th regular meeting of the NCAB was adjourned at 4:00 p.m. on Thursday, 4 September 2025.

12/03/2025
Date

John Carpten Digitally signed by John Carpten Date: 2025.12.03 09:48:52 -08'00'
John D. Carpten, Ph.D., Chair, NCAB

12/05/2025
Date

SHAMALA K. SRINIVAS -S Digitally signed by SHAMALA K. SRINIVAS -S Date: 2025.12.04 14:29:21 -05'00'
Shamala Srinivas, Ph.D., Executive Secretary

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