Department of Health and Human Services

Public Health Service

National Institutes of Health

National Cancer Institute

National Cancer Advisory Board

Summary of Meeting
May 13-15, 1985
Building 31, Conference Room 6
National Institutes of Health
Bethesda, Maryland

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The National Cancer Advisory Board (NCAB) convened for its 54th regular meeting at 8:30 a.m., May 13, 1985, in Building 31, National Institutes of Health (NIH), Bethesda, Maryland. Dr. David Korn, Chairman, presided.

Board Members Present

Mr. Richard A. Bloch
Dr. Roswell K. Boutwell
Dr. Victor Braren
Mrs. Helene G. Brown
Dr. Ed L. Calhoon
Dr. Tim Lee Carter
Dr. Gertrude B. Elion
Dr. Robert C. Hickey
Dr. Geza J. Jako
Dr. David Korn
Mrs. Rose Kushner
Ann Landers
Dr. LaSalle D. Leffall
Dr. Enrico Mihich
Dr. William E. Powers
Dr. Louise C. Strong

President's Cancer Panel

Dr. Armand Hammer
Dr. William P. Longmire, Jr.

Ex Officio Members

Dr. Elizabeth Anderson, EPA
Dr. Hollis Boren, VA
Ms. Karen Deasy, CDC
Dr. Allen Heim, FDA
Dr. Lakshmi Mishra, CPSC
Dr. David Rall, NIEHS

Absent

Mrs. Angel Bradley
Dr. J. Gale Katterhagen
Dr. John A. Montgomery

* For the record, it is noted that members absented themselves from the meeting when discussing applications (a) from their respective institutions or (b) in which conflict of interest might occur. This procedure does not apply to "en bloc" actions.

Liaison Representatives

Mr. Alan C. Davis, Vice President for Governmental Relations, New York, New York, representing the American Cancer Society.

Dr. Patricia Jost, Biophysics Program, Washington, D.C., representing the National Science Foundation.

Ms. Barbara Farley, Head Nurse, Ambulatory Care for the Cancer Service, Clinical Center, NIH, Bethesda, Maryland, representing the Oncology Nursing Society.

Dr. Raymond E. Lenhard, Associate Professor of Oncology and Medicine at the Johns Hopkins Hospital, Baltimore, Maryland, representing the American Society of Clinical Oncology.

Dr. Edwin A. Mirand, Associate Institute Director of Administration, Roswell Park Memorial Institute, Buffalo, New York, representing the Association of American Cancer Institutes.

Dr. John F. Potter, Director, Lombardi Cancer Center, Georgetown University, Washington, D.C., representing the American College of Surgeons, Society of Surgical Oncology.

Dr. James Robertson, Director, Human Health and Assessment Division, U.S. Department of Energy, Washington, D.C., representing the U.S. Department of Energy.

Members, Executive Committee, National Cancer Institute

Dr. Jane E. Henney, Deputy Director, National Cancer Institute
Dr. Richard H. Adamson, Director, Division of Cancer Etiology
Mr. Philip D. Amoruso, Associate Director for Administrative Management
Mrs. Barbara S. Bynum, Director, Division of Extramural Activities
Dr. Bruce A. Chabner, Director, Division of Cancer Treatment
Dr. Peter J. Fischinger, Associate Director, National Cancer Institute
Dr. Peter Greenwald, Director, Division of Cancer Prevention and Control
Dr. Alan S. Rabson, Director, Division of Cancer Biology and Diagnosis
Executive Secretary, Ms. Iris Schneider, Director of Staff Operations

In addition to NCI staff members, meeting participants, and guests, a total of 10 registered members of the public attended the meeting.

I. Call to Order--Dr. David Korn

Dr. Korn, Chairman, called the meeting to order and welcomed members of the Board, the President's Cancer Panel, liaison representatives, guests, staff of the National Cancer Institute (NCI), and members of the public. He announced that Dr. DeVita was in Rome to receive an award and Dr. Jane Henney, the Deputy Director, would present the Director's Report.

Procedures for conducting Board meetings were reviewed. Members of the public who wished to express their views on any matters discussed by the Board during the meeting were invited to submit their comments in writing to the executive secretary of the NCAB within 10 days after the meeting. Dr. Korn emphasized the importance of having a quorum of 12 members present for each occasion when a vote is taken.

II. Future Board Meeting Dates

Future Board meeting dates were confirmed as follows: October 7-9 and December 2-4, 1985. The following dates were confirmed for 1986: February 3-5, June 2-4, October 6-8, and December 1-3.

III. Consideration of NCAB Minutes of November 1984

The Board unanimously approved the minutes of the November 1984 meeting as amended, and the minutes of the February 1985 meeting, as amended.

IV. Report of the President's Cancer Panel--Dr. Armand Hammer

Dr. Hammer summarized the Panel's concern about disturbing press reports on the possibility of postponing funding for grants during 1985-86 and the doubt concerning the reauthorization of the National Cancer Act with all its special provisions intact. He reported that the National Coalition for Cancer Research was formed quickly and responded effectively to these concerns and that he, as Chairman of the President's Cancer Panel, called on the President's Science Advisor and his Deputy and also sent a message directly to the President. Currently, the funding of grants is under review, and a favorable compromise is probable. The outlook for reauthorization of the National Cancer Act in a form that will retain much of the Director's special authority is better than was previously thought.

The Panel met on February 25, 1985, at the Wistar Institute in Philadelphia and on April 22 at the Johns Hopkins Oncology Center in Baltimore. In this year's series of regional meetings, the Panel is focusing on two main issues: 1) the most important research opportunities in each center visited and 2) the effect on such research programs at each center if NCI were to operate at or under current budget levels.

Presentations on these issues and followup discussions have alerted the Panel to opportunities that exist and the principal problem of lack of funding to pursue the opportunities expeditiously. In Philadelphia, the Panel heard a report on the treatment of a number of cancers with monoclonal antibodies; in Baltimore, the key presentation was on the treatment of tumors of the liver with radiolabeled antibodies.

The Panel's next meeting is scheduled to take place June 3, 1985, at Memorial Sloan-Kettering in New York, after which the Panel plans to review the transcripts of all three sessions and prepare a report that can be provided to the NCAB and to other appropriate organizations. The report will illustrate what is actually taking place in the centers, concentrating on the opportunities that are available in the field of cancer research.

Dr. Hammer reported that on February 11, 1985, the Hammer Cancer Prize for 1984 was awarded to Dr. Robert Gallo, NCI, and three Japanese scientists who have worked with Dr. Gallo in isolating the first human T-cell leukemia lymphoma virus, known as HTLV.

Dr. Hammer also reported that he was able to provide NCI with $100,000 to enable Dr. Steven Rosenberg to double his efforts in the area of treating cancer patients with lymphokine-activated killer cells and recombinant interleukin II. Work in this area is expected to increase at NCI and at UCLA.

V. Director's Report--Dr. Jane E. Henney

Dr. Henney, Deputy Director, NCI, presented the Director's Report, in the absence of Dr. DeVita. She announced that Dr. DeVita was receiving the Nervi Award from Pope John Paul II for his outstanding contributions to cancer treatment. She also announced that Ann Landers was to receive the degree of Doctor of Humane Letters from the University of Wisconsin for her strong commitment and tireless service to medical education and research and that Dr. Armand Hammer received the Stanley G. Kaye Memorial for his outstanding service in the fight against cancer.

Dr. Gregory Curt has been appointed Deputy Director of the Division of Cancer Treatment (DCT); Dr. Daniel Longo will assume the position of Associate Director of DCT for the Biological Response Modifiers Program; Dr. Carl Pinsky has been named Chief of the Biological Resources Branch, DCT. Dr. Henney has accepted the positions of Associate Vice Chancellor for the Medical Center of the University of Kansas and Associate Professor in the University's Department of Medicine; she will be leaving the Institute at the end of June.

Several staff members have received honors and awards since the February meeting, including:

- Dr. Thomas Waldmann, Chief of the Metabolism Branch in the Division of Cancer Biology and Diagnosis, has been elected to the National Academy of Sciences.

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- Dr. Marc Lippman, Chief of the Medical Breast Cancer Section, Division of Cancer Treatment, received the American Federation of Clinical Research Young Investigator of the Year Award.

- Dr. Bruce Chabner, Director of the Division of Cancer Treatment, has been chosen to receive the 16th David A. Karnofsky Award, the highest award conferred each year by the American Society of Clinical Oncology.

The Diet, Nutrition, and Cancer Prevention booklet has been published and has generated a great deal of interest and congratulatory letters from all sectors of the community.

Followup Items

(1) The Board's resolution regarding smokeless tobacco was conveyed in a letter to the Surgeon General, who has formed an advisory committee to conduct a comprehensive analysis of the prevalence, usage patterns, trends, and health consequences of using smokeless tobacco. NCI plans to sponsor a consensus development conference, with the National Institute of Dental Research and perhaps the Centers for Disease Control, in the spring of 1986 regarding this issue. Dr. DeVita and Dr. Scott Thompson, the Executive Director of the National Association of Secondary School Principals, wrote a letter to the 34,000 principals of public and private secondary schools in this country, pointing out the risk of using tobacco in all forms. A followup letter was sent by the Surgeon General to stimulate the interest of those who educate youth and who have a responsibility to teach our youth about the possible consequences of smokeless tobacco.

The Office of Cancer Communications is planning to produce public information pamphlets on this topic specifically targeted to the 12- to 18-year-old age group.

(2) NCI will provide the Journal of Cancer Research with phase-out support through December 1985. Beginning in January of 1986, the Journal will become self-sufficient; current plans are to raise the subscription rate and apply page charges to investigators who submit manuscripts for publication.

(3) In the area of AIDS research, the screening test for HTLV-III antibody has become available and is being used by blood banks throughout the country to screen units. Alternative testing sites have been set up for those individuals in the high-risk or at-risk categories so they can receive a test without donating blood.

Development of animal vaccine models and the subunit vaccine itself continues; NCI is continuing its investigation of possible antiviral drugs that might be therapeutically helpful. Thus far, of the four such drugs being examined, suramin seems to be the most promising.

(4) In response to the RFP that NCI had issued to solicit contract proposals for Small Business Awards within the Small Business Innovative Research Program, 238 proposals have been received and are now being reviewed.

(5) Ninety-nine applications for the NCI Outstanding Investigator Grant will be discussed tomorrow. A similar mechanism, to be known as the Merit Award, is under consideration by NIH. This award will be based on the proposed project rather than the record of the individual and, like the Outstanding Investigator Grant, will be for 7 years. The Board was asked to submit written comments on the desirability of this kind of award.

(6) NCI is expecting further reductions in FY 1986 of full-time equivalents (FTE). The FTE ceiling and hiring restrictions have made it impossible for the Institute to run its usual summer program. Through donations received by the NCI Gift Fund, however, the Institute will support approximately 50 students in intramural programs.

(7) A new training program has been authorized by NCI, the State Department, and the European Organization for Research and the Treatment of Cancer. This exchange program will allow scientists with 3 years of postdoctoral training to work in laboratories in institutions throughout the United States and in participating countries.

(8) The use of the Physicians Data Query (PDQ) system has increased and is now in the range of 500 hours of connect time each month, equivalent to the most used data bases of the National Library of Medicine. To help expand the use of PDQ, NCI may sign with an additional vendor, Mead Data. Through Mead Data's Medis program, PDQ would be accessible to some nonphysicians, but only as previously advised by the Board. The Cancer Information Subcommittee was asked to consider this problem and bring a recommendation to the full Board on Wednesday, May 15.

Budget

Budget actuals for 1984 were $1,092,897,000; the 1985 appropriation was $1,196,528,000. As part of the attempt by Congress to limit Federal spending, both a rescission and deferral were mandated in FY 1985. The amount under consideration for removal from the budget was $6.2 million in 1985, of which $4.3 million was proposed to be rescinded from the areas of travel, consulting services, and printing. Congress has now decided to release this $4.3 million, to be obligated beginning July 1, 1985. The remaining $1.9 million is still planned as a deferral for 1985.

As a result of the Administration's proposal to multi-year fund grants, NCI's share had been reduced by 240 competing grants from its appropriated level of 1,030 competing grants. Discussions continue between the Secretary, OMB, and the congressional committees regarding this policy.

Hearings before the Appropriations Committee during March proceeded favorably. Program accomplishments, desirable future directions, and the mechanisms used to support areas of research were discussed.

Assumptions underlying the FY 1986 President's budget include funding all grants at recommended levels (less normal negotiations), holding indirect

costs at 1985 levels, reflecting the impact of multi-year funding in 1985 on 1986 programs, and holding most programs at the 1985 level. These assumptions would result in 807 competing projects, funding 26 percent of approved grants, and a payline in the area of 160.

Preparations for developing the 1987 bypass budget have begun. Currently, plans call for working with the following assumptions and moving all elements forward 1 year from the 1986 bypass budget which was based on the same assumptions. These assumptions, based on NCI's goals for the year 2000 are:

- Paying 40 percent of competing research project grants.
- Doubling the number of centers by 1990, beginning with five additional centers in 1987.
- Funding the Clinical Cooperative Groups at recommended levels to assure a doubling of patients into research protocols.
- Funding construction at approximately $25 million to $30 million annually.
- Doubling the cancer control effort in 1987.

New Items

(1) A new NIH program initiative known as the Academic Research Enhancement Award is aimed at giving special attention to small 4-year colleges and universities which currently have minimal amounts of research support from the Public Health Service. Of all the applications submitted to NIH, NCI received 41 assignments. These awards, known as R15's, are for $50,000 each, for a 24-month period, and are nonrenewable.

(2) NCI will fund approximately $5.5 million of the biennial budget of the International Agency for Research Against Cancer.

In response to Dr. Linus Pauling's continued appeals concerning NCI's posture and involvement in trials on the use of vitamin C in treating cancer patients, the Board reaffirmed that the standard channels of support for the development of scientific information are open and that no other action is needed.

VI. NIH Centennial Observance--Mr. Thomas Flavin

Mr. Flavin, Assistant to the Director, NIH, presented highlights of NIH's 100 year history and discussed plans for the observance of the NIH centennial in 1987. Scheduled events include the following:

- Each Institute will select 1 month during the centennial to hold scientific symposia or similar events at grantee institutions while an NIH exhibit is displayed on campus or in a local science museum.

- An NIH Centennial Nobel Prize reception and dinner.

- An international symposium keyed to the September 1987 meeting of the European Medical Research Council in Washington and related activities, possibly satellite-linked teleconferences with the Pasteur Institute and other European health organizations.

- Burying a time capsule containing the names of all NIH employees as of 1987.

VII. Immunotherapy of Cancer with Lymphokine-Activated Killer Cells and Recombinant Interleukin II--Dr. Steven Rosenberg

Dr. Rosenberg summarized his laboratory's work in developing adoptive immunotherapy using lymphokine-activated killer (LAK) cells for the treatment of cancer. The procedure has shown promise in animal systems and preliminary clinical trials. Adoptive immunotherapy is the transfer of immune cells with antitumor reactivity to a tumor-bearing host. Until now, a major obstacle to the use of adoptive immunotherapy to treat human malignancy has been the inability to demonstrate the existence of tumor antigens on human tumors that would permit development of tumor-specific antibody preparations. The goal of the work was to develop a method for promoting the rejection of established human tumors by the transfer of lymphoid cells with antitumor reactivity. The advantages of adoptive immunotherapy as compared with attempts to stimulate the immune system in vivo were described. LAK cells are generated from either mouse or human cells by a technique first developed in 1980. Incubation of normal lymphocytes in the lymphokine interleukin II (IL-2), a substance produced by normal lymphocytes in tiny amounts, can result in the generation of cells that are capable of lysing tumor cells. The exact conditions for generating LAK cells are quite important. The LAK-cell phenomenon represents a new kind of cytolytic system that is distinct from natural killer cells.

To determine whether LAK cells will exert antitumor effects in humans, a source of IL-2 (normally available only in minute quantities) was necessary. The development of recombinant DNA technology provided this source of IL-2.

The activity of LAK was demonstrated by injecting transplantable murine tumors in animal models, followed in several days by an intravenous infusion of LAK cells along with recombinant IL-2. The results showed a 90-percent reduction in the number of metastases compared with control groups. Reduction in metastases was shown to depend upon the quantity of LAK cells and the amount of IL-2 given. This finding is important in human trials because the number of LAK cells that can be obtained from a cancer patient may be limited. Results of 44 consecutive experiments using a wide variety of tumors showed dramatic reductions in metastases. In addition to reducing the number of metastases, the treatment markedly prolonged survival and cured about 40 percent of the mice. Development of resistance to LAK cell lysis does not appear to occur. The mechanism by which IL-2 and LAK cells produce their antitumor effect was discussed. LAK cells appear to have the ability

to recognize the change in a cell as it transforms from normal to malignant. LAK cells also can divide in vivo and maintain antitumor activity.

Dr. Rosenberg discussed trials of this treatment in human cancer patients. Testing was performed in three stages: administration of LAK cells alone to prove that large numbers of lymphoid cells could be obtained from patients and safely reinfused after incubation with IL-2, determination of safe methods of administration of recombinant IL-2, and testing of the combination of LAK cells and recombinant IL-2. Patients in the trials were those for whom all standard treatment modalities had failed. The trials demonstrated that it is possible to give relatively large numbers of packed killer cells to patients safely with very few side effects. No antitumor effects were seen when LAK cells were given alone. When recombinant IL-2 became available in purified form, the maximum tolerated dose and safe method of administration were established. Treatment with recombinant IL-2 produces side effects that can be managed with appropriate medications.

Phase I trials using combined therapy with LAK cells and IL-2 began in October 1984. Stressing that data were unpublished and very preliminary, Dr. Rosenberg reported that three patients had completed therapy to provide at least 1 month of followup. No response was observed in one patient with metastatic melanoma 6 to 8 weeks after therapy. However, another patient with metastatic melanoma treated with 47 doses of IL-2 and nine cell infusions underwent a complete regression of tumor and remains free of disease 4-1/2 months after therapy. A second patient with pulmonary metastases from a rectal cancer showed complete regression of three of five pulmonary nodules and partial regression of the other two following 35 doses of IL-2 and nine cell infusions.

In closing, Dr. Rosenberg stressed the preliminary nature of the results because of the small number of patients and short followup. He noted that the therapy is complex, requiring administration of IL-2, plasmapheresis to collect lymphocytes, incubation of the lymphocytes with IL-2 to transform them to killer cells, and reinfusion of the killer cells in combination with administration of IL-2.

Future plans include attempts to improve this treatment by increasing delivery of LAK cells and IL-2 to the tumor site by using monoclonal antibodies directed against the tumor antigens. In addition, a new protocol will evaluate the effect of treating tumors at earlier stages of their development in patients who have a high likelihood of recurrence after surgical excision of primary lesions. Although the work is preliminary, it demonstrates that this kind of immunologic approach is capable of promoting the regression of established tumors in humans. The challenge is to develop methods to improve the treatment to make it more widely applicable.

In the discussion that followed Dr. Rosenberg's presentation, the following points were made:

- Even though results are preliminary, adoptive immunotherapy appears to hold great promise for cancer therapy. Additional patients are

now receiving the therapy, but it is too early to determine results. Until recently, only two patients could be treated at a time.

- Most tumors are probably susceptible to this therapy. LAK cells are capable of recognizing any kind of transformed cell; thus, they may represent a form of immunosurveillance against transformed cells.

- No evidence has been demonstrated that suppressor factors are playing a role in adoptive immunotherapy.

- Recombinant IL-2 is available from several biotechnology firms; NCI is not obligated to any of them.

- Large amounts of IL-2 are required for clinical trials because its half-life is only about 4 to 5 minutes.

- Permission from the FDA to conduct these clinical trials took several months.

- An invitation was extended by Dr. Hammer to NCAB members to attend a 3-day symposium on adoptive immunotherapy in September at the Salk Institute.

- Lymphoid infiltration disappears once IL-2 infusions are stopped.

- Fluid retention is a difficult side effect that appears to be related to mast cell degranulation stimulated by IL-2.

- Animal studies using chemotherapy followed by LAK-IL-2 therapy showed better results than those obtained with chemotherapy alone.

- One method of enhancing the therapy may be to infuse the cells directly into involved organs.

VIII. Centers Program Guidelines--Dr. Lucius F. Sinks

Dr. Sinks presented recommendations for revisions to current core grant guidelines. During the past 2 years, planning meetings were held to address issues facing cancer centers. Suggestions for revisions to the guidelines came from these planning meetings and from colleagues and cancer center directors. A draft of the recommended guidelines was prepared by the staff in conjunction with the Grants Administration Branch and the Grants Review Branch, NCI. The recommendations were reviewed by the Subcommittee on Centers and Community Oncology of DCPC's Board of Scientific Counselors (BSC) and at a meeting of cancer center directors. The revised recommendations were unanimously endorsed by DCPC's full Board of Scientific Counselors.

The suggested changes to the guidelines were discussed specifically and in detail:

- A change indicating that program directors "should" rather than "must" be principal investigators on funded research grants was addressed. Discussion of this revision centered on whether the change in wording was adequate to indicate the intent of the change and on whether site visitors could be misled because the change in language was not strong enough.

- A recommendation to delete the current cap of $60,000 on developmental funds was cited. During discussion of this suggested change, it was clarified that no administrative cap would be written into the guidelines. The only exercise of a cap will be through the peer review process and the budgeting process. This will establish a pool of developmental funds based on the record of the cancer center and the cancer center director.

- The recommendation to maintain at 50 percent the amount of increase that could be requested for the entire core grant at the time of renewal was explained. Several Board and staff members discussed how this recommendation evolved. Possible changes to this cap are to retain the 50 percent cap, lower the cap, raise the cap, or scale it based on the size of the core grant award. At the April 12 meeting of cancer center directors, considerable discussion of this issue took place, and several options were expressed on how to relate a cap to the amount of P01 and R01 grants that an institution has. It was concluded that a few exceptions could be handled on a case-by-case basis and that a change in the overall policy at this time is premature and requires further study. Summarizing the sentiments expressed at the April 12 discussion, Dr. Sinks said that there were a number of different adherents for a number of different policies, but no one felt comfortable in recommending any one policy. However, the policy should be studied for possible change in the future.

- The recommendation was made to delete the requirement that salary support for staff investigators may be used only for the individuals named in the application. The intent is to make the Principal Investigator, the cancer center director, responsible for any substitutions that occur and make the substitutions subject to review during site visits.

- It was recommended to retain the current cap of 25 percent of the total award for staff investigators, with a phase-down required if it is currently higher. The excess funds are to be deleted in subsequent years.

- Following some discussion of the issue of the quality-control formula for qualification on a staff investigator's salary, the Board voted to approve the recommendations.

Consortium Guidelines--Dr. Lucius F. Sinks

Dr. Sinks reviewed the background of the development of consortium grants. During the planning meetings of the past 2 years, the issue of how

to promote cancer control research and related areas within the cancer centers and the problems of appropriate review guidelines for consortium cancer centers as they currently exist were discussed. As a result, NCI staff developed draft guidelines for a Consortium Cancer Center Support Grant. This program would be contingent on additional funds appropriated by Congress to cancer control but administered by the Cancer Centers Branch staff.

The draft guidelines were presented to the subcommittee of DCPC's BSC and, at the April 12 meeting, to the cancer center directors and their colleagues and administrators. Subsequently, the instrument was presented to the full DCPC BSC, and it was passed unanimously.

Dr. Sinks summarized the purpose of the instrument. The document takes into account varying needs throughout the country for existing consortia as well as for those that will be established. The lead institution could be a health agency or a university in an underdeveloped or underserved area. The primary purposes are to support cancer control and related research, encourage biochemical epidemiological studies, and stimulate early cancer control studies involving clinical trials such as early diagnosis or prevention.

Several issues related to consortium development were discussed following the presentation:

- Institutions of all sizes and areas of influence would have the opportunity to get together to address the problems of cancer control in their region.

- The low research base figure of $300,000 was set to increase the eligibility of institutions that may have the capability to start a new program, and that currently may be funded for grants in epidemiology, prevention, or other cancer control-related studies. This instrument is intended to provide a link between cancer control research supported through NCI dollars and those supported by health departments committed to the transfer of knowledge as cancer control application.

- Concern was expressed by Board members regarding the potential non-comparability in an ad hoc review of consortium grants. The staff's response to this concern was that the ad hoc review would in each case involve a core of members who would provide continuity and would be familiar with the concepts of rigorous research in cancer control.

- The Board expressed its desire that all participating institutions in the consortium have a firm commitment and investment in the consortium to assure its success.

- The purpose of establishing a consortium was clarified as coordinating efforts among institutions, including state health departments, to promulgate cancer control-related research, which could then be transferred into application by using state health resources.

Geographic Distribution--Dr. Jerome Yates

Dr. Yates addressed the issue of geographic distribution of centers with regard to both the community programs and the centers programs.

The Community Clinical Oncology Program (CCOP) was started a year ago. The circulation of a new RFP is being delayed so that information from the evaluation of the community programs, which will be available later this year and early next year, can be used to refine the RFA to address the strengths and eliminate program weaknesses. Information from the evaluation will not be available before the end of the year. Because of this, a 1-year administrative extension was requested for the CCOP's.

The CCOP is designed to provide funding directly to community participants in clinical research but grantees also serve as the administrative focus for other types of cancer control activities in the community. This program differs from the Cooperative Group Outreach Program (CGOP), where the control of the funds rests with the cooperative groups, which distribute funds to individual community investigators.

The evaluation will include the quantity and quality of patient accrual to clinical trials as well as the evaluation of information diffusion--the influence of these kinds of programs on the standards of practice in hospitals and communities.

Dr. Yates reviewed the history of efforts to resolve the problem of geographic distribution of cancer centers and the issues involved. He suggested that a working group starting early next fall would develop evaluation information from the community programs and make recommendations aimed at satisfying the future needs of community cancer control efforts. The evaluation would try to determine whether the addition of clinical cancer centers without a laboratory component would be an appropriate way to meet these future needs.

The Board voted to grant the 1-year administrative extension to the CCOP's. The staff is to give the Board a full presentation on the evaluation and the preliminary working groups' recommendations at a meeting of the NCAB at the beginning of the year.

IX. Subcommittee Reports

Innovations in Surgical Oncology--Dr. Ed L. Calhoon

Dr. Calhoon reported that the subcommittee decided to continue liaison with SORDS. An indepth discussion of grants focused on the K08 grant and its special features.

A great deal of discussion centered around elevating the organizational status of surgery within NIH. It was recommended that a means be identified to recognize young people who pursue additional training in oncology and in research. People who have been recruited and specially trained in a surgical

oncology program should be eligible to receive some type of certification, fellowship, the opportunity for a master's degree in surgical oncology, or some other recognition. No action was taken.

The subcommittee commended NCI for its cooperation and continued vigorous campaign to achieve further status for surgical oncology within the Institute and to expand grants awarded in surgical oncology.

THe Board voted to accept the subcommittee's report.

Cancer Control for the Year 2000--Dr. LaSalle Leffall

The subcommittee discussed the report Cancer Control Objectives for the Nation, 1985-2000. Dr. Edward Sondik, chief of DCPC's Surveillance and Operations Research Branch, described the process used to develop the report. By reviewing the state of the art in cancer control, four committees developed recommendations on achieving the goal of 50 percent reduction in cancer mortality rate by the year 2000. The recommendations were in the areas of prevention, screening and detection, treatment, and surveillance. The report was then discussed in detail; Dr. Leffall summarized the discussion for Board members. Major points included:

- Evidence for some assertions made in the report need additional and more current references, especially in the areas of nutrition and smoking.

- The report should be made useful to the lay public.

- The report should be completed and disseminated as quickly as possible.

It was pointed out that while the most dramatic opportunities for reducing cancer deaths will come from basic research, more resources for cancer control research are needed to determine how best to use what is learned from basic research.

A draft letter regarding tobacco taxation and subsidies that was written at the subcommittee meeting was read to the Board by Mrs. Helene Brown for the Board's approval. Activities to promote the NCAB Smokeless Tobacco Resolution were also discussed.

During discussion of the report on the goals for the year 2000, the following concerns were expressed:

- The Board needs to be kept up to date on the progress of the goals; it was decided that the November program review meeting would be the appropriate time for such a progress report.

- Concerns were expressed that the goal of reducing cancer mortality by 265,000 by the year 2000 was too ambitious and perhaps could not be met. Problems with interpreting the data were discussed. It was agreed that these issues would be addressed at the November meeting.

The Board voted to accept the subcommittee report. Organizations to receive the letter on tobacco were suggested, and members were asked to submit additional suggestions to Mrs. Bynum. The Board then voted to accept the letter on tobacco.

Organ Systems--Dr. Robert C. Hickey

Dr. Hickey pointed out that the subcommittee met on May 12 and that he was presenting an interim report. A progress report on the activities of the headquarters at Roswell Park was presented. An intergroup meeting of members from all five working groups of the Cellular Basis of Tumor Heterogeneity took place in Buffalo on April 11-12.

The possibility of adding another organ site, neuro-oncology, was discussed at a meeting in Bethesda on April 17-18. Data were presented to support the need for this addition. This proposal will be presented to the DCPC BSC in September. An interim report was presented on the proposed Aero-Digestive System Site Task Force, which is now being assembled and is composed of basic scientists, clinical scientists, epidemiologists, and others.

The Board voted to accept the subcommittee's report.

Cancer Information--Mr. Richard Bloch

Mr. Bloch reported that after extensive discussion a motion was made and passed to approve a PDQ license agreement with Mead Data Central on a limited basis so that NCI can evaluate the use of the Mead system by nonphysicians, if any. NCI staff should consult further with the AMA, which is participating in the total PDQ evaluation, on the need to evaluate use of PDQ by individuals not part of the medical community.

The subcommittee heard a report on cancer information activities within the American Cancer Society. Mr. Bloch noted the cooperative efforts between NCI and the ACS.

A report was presented by Mr. Paul Van Nevel, Director of the Office of Cancer Communications, on marketing of PDQ. A major marketing effort a year ago to introduce PDQ through a series of printed advertisements to medical and computer journals followed the signing of the first vendor, BRS Saunders. A major teleconference press conference on January 31, broadcast by satellite to more than 200 hospitals across the country, was timed to coincide with the signing. An exhibit on PDQ is being taken to major medical meetings nationwide. Additional plans include updating patient education materials to include PDQ. The problem of inaccuracies in the PDQ Directory File was discussed. The Board voted to accept the subcommittee's minutes.

X. Peer Review Process--Dr. Harold Waters

Dr. Waters, Deputy Chief for Referral, Referral and Review Branch, Division of Research Grants (DRG), NIH, focused his talk on management and leadership issues involved in running DRG. The two main components of this Branch are the Referral Section, where applications are received and assigned to a study section and potential funding component, and the Review Section, which encompasses the study sections that conduct the peer review.

The executive secretary, who is central to the process, selects the members and the chairman and makes and tracks the review assignments. This is a consultative job with the scientific community, other members of the NIH community, and the executive secretary's supervisor. Another key person in the process, the chairperson of the study section, facilitates the process and conducts the scientific part of the discussion. The members of the study sections provide the energy and the specific subject knowledge. Peer review consists of scientists evaluating the research proposals of other scientists. The study section guidelines are an important part of this process.

About 10,000 applications are received each round. The applications are processed in a project control unit and then sent to an assignment unit where referral officers who are senior scientists read the applications. Each referral officer assigns applications to 9 or 10 study sections and to the potential awarding Institute. A major problem has been that while the number of applications has recently increased 15 percent, the project control staff has decreased 30 percent.

During discussion, the following points were made:

- When a poor priority score is assigned due to dissenting opinions, the executive secretary should request that the dissenting opinion be written and included in the pink sheet to help later reviewers.

- Study section members are selected because of their subject expertise and because of their ability to work well in a group. Often, they are first tried out as ad hoc reviewers.

- The burden of serving on study sections and going on site visits was cited as a deterrent to recruiting qualified people; however, this is not seen as an insurmountable problem. Dr. Waters pointed out that the reviewers have the opportunity three times a year to associate with some of the best minds in their field, to interact, to establish networks, and to become aware of research ideas in their early stages.

- The criteria and time required to form a new study section were discussed. The formation of special study sections was given as an alternative when not enough applications are received in an area to charter a standing study section.

- The advantages and disadvantages of using mail ballots were explored.

XI. New Business--Dr. David Korn

Proposed future agenda items include:

- Discussing the relationship between the year 2000 goals and the need for budgetary projections and the possible need to shift funds.
- Discussion of Dr. John Cairn's book Cancer, Science, and Society.
- Discussion of the inappropriate utilization of chemotherapy and other modalities of intervention in treating cancer.
- Overview of NCI's programs involving international activities.
- Presentation of the Administration's views on international science and U.S. foreign policy.

XII. Adjournment--Dr. David Korn

The 54th meeting of the NCAB was adjourned at 11:46 a.m., Wednesday, May 15, 1985.

SEP 24 1985

Date

David Korn, M.D.
Chairman
National Cancer Advisory Board