THE CANCER LETTER

Vol. 7 No. 42

Oct. 16, 1981

Subscription $125.00 per year

P.O. Box 2370 Reston, Virginia 22090 Telephone 703-620-4646

NCI FACING ITS MOST SERIOUS FISCAL CRISIS WITH ORDER TO CUT 1982 BUDGET 12 PERCENT; NCAB OBJECTS TO REAGAN

The 12 percent cut in 1982 fiscal year budgets of most federal agencies demanded by President Reagan has placed NCI face to face with the most serious fiscal crisis in its history. Although the House last week rejected efforts to impose that cut and passed the HHS appropriations bill intact, with $1.030 billion for NCI, the Senate had not acted by press time and the issue is still very much alive.

(Continued to page 2)

In Brief

TERMS EXPIRE NEXT YEAR FOR SIX NCAB MEMBERS, ONE ON PANEL; FRAUMENI PREVENTIVE ONCOLOGY PRESIDENT

TERMS OF SIX members of the National Cancer Advisory Board will expire next year—Chairman Henry Pitot, Bruce Ames, Harold Amos, Marie Lombardi, Frederick Seitz, and Philippe Shubik. Pitot, Ames and Shubik are three of the six with expertise in environmental or occupational carcinogenesis, as required by an amendment to the National Cancer Act. Their replacements (if they are not reappointed) must be in the same category. Lombardi and Seitz have two of the four required lay appointments. Amos is also a member of the President's Cancer Panel and will continue to sit on the NCAB as an ex officio member. Panel member Bernard Fisher's term expires next year. NCI Director Vincent DeVita asked Board members for names of replacement candidates, which will be forward to the White House. NCAB and Panel members are appointed by the President. . . . **JOSEPH FRAUMENI**, director of NCI's Field Studies & Statistics Program, is the new president of the American Society of Preventive Oncology. Anthony Miller, of the National Cancer Institute of Canada, is president elect; David Schottenfeld, Memorial Sloan-Kettering Cancer Center, is secretary-treasurer, and Raymond Seltser, Univ. of Pittsburgh, and Joseph Cullen, UCLA, are members of the board of directors. Council chairmen are Guy Newell, Univ. of Texas, and Virginia Ernster, Univ. of California (San Francisco), epidemiology and biometry; John Weisburger, American Health Foundation, and Diane Russell, Univ. of Arizona, carcinogenesis; Cullen and Arlene Barro, NCI, education and human behavior; and Daniel Miller, Preventive Medicine Institute-Strang Clinic, and Robert Fontana, Mayo Clinic, screening and diagnosis. Curtis Mettlin, Roswell Park Memorial Institute, is program chairman for the annual meeting scheduled for March 25-26 in Bethesda. . . . **RICHARD GAMS** and David Wirtschafter, developers of the Univ. pf Alabama (Birmingham) computerized protocol data system, have teamed with ELM Services Inc. to assist groups and community programs which require research data systems. ELM manages the Community Hospital Oncology Program Data System.

NCAB AGREES CUTS SHOULD BE SELECTIVE, SOME PROGRAMS DROPPED IF NECESSARY

(Continued from page 1)

The Administration is assuming the cuts will be made, one way or another. HHS and most other departments are operating under a "continuing resolution" providing interim funding through Nov. 20 at the 1981 level. For NCI, that is based on the $989 million it received in 1981, $36 million under Reagan's budget request for the Cancer Program in 1982. If the 12 percent reduction is applied, the cut will be $123 million, slahsing NCI's budget to $903 million.

If it appears Congress will not go along with the cuts in the appropriations bills, the White House is considering submitting deferrals, which can be vetoed by one house of Congress but remain in effect until one house or another takes negative action. The probable necessity of renewing the continuing resolution complicates matters, and the Administration is counting on long delays which will permit the deferrals to remain in effect too far into the fiscal year to change.

NCI and NIH have been ordered to submit spending reduction plans which will accommodate the 12 percent cut. Those plans must be made before the end of November.

Director Vincent DeVita, discussing the situation at last week's meeting of the National Cancer Advisory Board, noted that the meeting held earlier by the Board's Subcommittee on Planning & Budget was in the "Director's Room" which is lined with portraits of past NCI directors.

"They are all smiling," DeVita said. "None of them had the kind of budget problems I have. Their budgets were always going up. I wonder what I'll look like when they take my picture, if they have enough money to do that when I leave."

In fact, those portraits were taken or painted when those directors knew they were leaving, which may be one reason for the smiles. All of those in recent years thought they had budget problems, although DeVita is correct—none had to take a $123 million cut under the Administration's original request, nor try to get along with $86 million less than they had spent the previous year.

DeVita presented the subcommittee with this question: Should the 12 percent be applied across the board with all programs suffering the reductions equally? Or should the cuts be made selectively, with some programs being dropped entirely, others cut more or less than 12 percent, a few actually getting increases, and some money reserved for new programs?

The subcommittee chose the latter alternative, but when Subcommittee Chairman Frederick Seitz presented that to the full Board, he ran into opposition.

Board members Sheldon Samuels and Rose Kushner supported across the board cuts, with the cuts being applied selectively within each program. "Priorities have developed over time," Samuels said. "How can we reject priorities set over the last year?"

Board member Philippe Shubik objected for another reason. "I'm rather surprised this Board does not react instinctively by trying to make sure the budget of NCI continues to increase," Shubik said. "Anything less will have an enormous deleterious effect on cancer research. This budget in constant dollars has been going backwards. There is less in constant dollars for grants than 10 years ago. We continue to face inflation, and it is selective inflation which affects certain areas of research more than the inflation average."

Shubik insisted that the Board should take a strong position against the cuts and make that position known. "Whether that will get any result remains to be seen, but not to do that would give the impression there are things in the Cancer Program the country can do without."

The Board agreed. After going along with the subcommittee's recommendation in favor of cuts selectively applied, with the NCAB membership participating in determining where the cuts are made, the Board agreed to a statement opposing any reductions. The statement will be sent by Chairman Henry Pitot to the President and key members of Congress.

The issue now is where the cuts will be made. NCAB members will be asked to respond by mail, with NCI's "hit list" due before the Board's next meeting Nov. 30. Harold Amos said that the issue "is too important to do by mail" and asked for a special meeting, but he failed to win support for that suggestion.

Board members had participated in development of the 1983 fiscal year bypass budget by ranking NCI's programs. That rank order offers some clues on how members will respond to the request to determine how cuts will be applied:

Research project grants (R01s, P01s, R23s) were given top priority. Intramural research was second, followed by cancer control prevention activities and construction, tied for third. Training grants (National Research Service Awards) was fourth.

Lumped into the category with the lowest priority were research contracts, cancer centers, cooperative groups, the Organ Site Program, clinical education, and research career awards.

"You all know my sentiments," DeVita told the subcommittee. "With big cuts coming, this may be the time to phase out the Organ Site Program. Cancer control can't escape cuts. We hear it coming down from the department, take cuts in cancer control. It's not possible or wise not to take a 12 percent cut in cancer control and cut research to the bone."

Cuts in cancer control will not hurt the impending

new chemoprevention clinical trials or the Hospital Oncology Program (since renamed the Community Clinical Oncology Program—see following story), DeVita insisted. "Those are among the highest priority programs in the institute," DeVita said.

DeVita noted that in budget meetings with NIH and HHS officials, in which other institute directors are participating, "It's hard for me to sit there and defend cancer control, cancer centers, construction, when all the others have only research, and they are being asked to cut research to the bone."

Other prospective budget targets mentioned by DeVita included:

- Resource contracts, which provide $12-15 million worth of materials—viruses, animals, reagents, chemicals—to investigators around the country and the world. "We can cut all of them, cold, dead, on the spot."
- The International Cancer Research Data Bank. "Everyone likes it, but perhaps we can make larger than 12 percent cuts there." The ICRDB budget is about $7.5 million a year. "We're just speculating," DeVita said. "But if we cut ICRDB 40 percent, that wouldn't kill it, although it would be leaner and limping."
- The Organ Site Program. "I've interpreted reports from the subcommittee to the Board as saying the program is good, and I agree. It is good. But that is not saying anything about relative priorities. I would say that if we have to cut, we can drop it. People (with Organ Site Program grants) can compete for R01s and continue to be funded."

Board member Gale Katterhagen commented, "If we don't make cuts right (in cancer control), when things do get better, we'll be faced with taking five years to get back on track."

"We don't want to annihilate cancer control," DeVita agreed. He pointed out that the Drug Development Program was reduced 10 percent "without reducing the effort. Some cuts also may be possible in the neutron generators project."

- Cancer centers. "We have two options on applying cuts there. Do we say goodbye from the bottom up (not funding those with lower priorities), or do we go back and renegotiate type 5 (noncompeting renewal grants), and renegotiate indirect costs."

In FY 1981, NCI funded all center core grants with priority scores through 199 at recommended levels. Others with scores up to 231 were funded on a sliding scale. If the decision is "to say goodbye from the bottom up," those between 199 and 231 would not be funded this year, DeVita said.

- The Cancer Information Service and other center outreach programs. "We can look and see what could be cut and allow some programs to survive, and then hope and pray we don't have to do it," DeVita said.

"I like the Cancer Centers Program," DeVita continued. "We need the cooperative groups, we can't do without them. But we could cut one, and save $3.5 million. The Organ Site Program is valuable, but we can allow that to go because the good people will get funded. Cutting construction, well, that's bad, but we can let construction go for a year."

"Nationally, it would be less painful if the cuts were made across the board. and there would be less criticism," Board member Morris Schrier commented.

"I might agree," DeVita said. "But if I had to choose between centers and the Organ Site Program, I would cut organ sites completely, and reduce the impact on centers."

Among options still under consideration by the department, DeVita said, are indirect cost reductions, which would permit funding of the same number of grants but shift much of the burden of overhead to the universities; not funding new grants while maintaining noncompeting renewals; and reductions in training, both in institutional support and indirect costs.

DRCCA COMMITTEE, ACCC, DEVITA REACH ACCORD ON COMMUNITY PROGRAM CRITERIA

The Committee on Community Oncology & Technology Transfer of the Board of Scientific Counselors for NCI's Div. of Resources, Centers & Community Activities hammered out a compromise set of criteria for the Hospital Oncology Program which eventually may support clinical research efforts in as many as 200 hospitals around the country.

The compromise involved give and take by the Board of Scientific Counselors members of the committee; by representatives of the Assn. of Community Cancer Centers who also are on the committee; and by NCI Director Vincent DeVita, who worked with the committee at a day long meeting last week.

One of the items agreed on readily by the committee was to change the program's name—it is now known as the Community Clinical Oncology Program (CCOP), so forget the HOP acronym.

Committee Chairman Charles Moertel submitted a revision of the proposal he had drawn up last month, incorporating recommendations developed by ACCC members at their August meeting in Chicago. The committee went through the Moertel document item by item, agreed on further revisions, and finished with a proposal which will be submitted to the DRCCA Board at its Oct. 22-23 meeting.

Excerpts from the revised proposal follow:

Introduction

This community cancer program is designed to meet a clear responsibility of the National Cancer Program mandated by Congress and enunciated in both Senate and House reports accompanying the 1974 Amendments to the National Cancer Act: That no American cancer patient should be deprived of highest quality cancer care simply because of where

he lives. This program is also designed to facilitate technology transfer and to conduct significant clinical cancer treatment and prevention research that will have direct pertinence to the overwhelming majority of cancer patients who are managed in the community. If these goals can be met a major step will have been taken towards primary objectives of cancer control, i.e. a reduction in the morbidity and mortality of cancer. This program is also based on the convinction that by mobilizing the resources of the community, the research objectives of the National Cancer Institute will not be compromised but rather will be complimented and made more cost effective.

Goals

This program has the following specific objectives.

a. To bring the highest quality cancer care to the American community.

b. To bring the resources of the community hospitals and clinics into national clinical cancer research programs.

c. To develop and improve methods for transfer of cancer management technology from academic center to community clinic and hospital.

d. To bring the resources of the community clinics and hospitals into national cancer control research programs and to conduct cancer control research at the community level.

It is not the purpose of this program to subsidize private cancer practice or to subsidize the conduct of non-research "protocols" for best standard clinical practice. The conduct of best clinical practice should be regarded as the primary responsibility of the physician in private practice. Certainly, however, education and technology transfer will be a vital cancer control objective of this program. Also, it may be anticipated that participation of community centers in well designed and conducted clinical research protocols will enhance the overall quality of care rendered by the community center. It is specifically not the purpose of this program to provide funding for every private physician who treats cancer patients regardless of his research motivations or capabilities. This is a research program that will be organized for the primary purpose of providing the highest quality research performed at the lowest possible cost.

This program is also not intended to replace existent and successful organizations involving cancer centers, cooperative groups, and community centers. This program should facilitate and enhance such successful endeavors. It is clearly not the purpose of this program to regiment all community cancer center research organizations into a common mold. Innovative approaches are encouraged.

It is projected that this program will eventually involve between 100 and 200 community cancer centers demographically and geographically located so that they can conveniently serve the entire population of the United States. The program will continue to involve a large number of private cancer physicians and surgeons and smaller clinics in the traditional satellite relationships with major cancer centers, regional cooperative groups, and national cooperative groups. It is anticipated that CCOPs funded under this program will work in cooperation with approximately 20 new or existent research bases such as those provided by major cancer centers, national cooperative groups, or regional cooperative groups. It is hoped that this program will bring a minimum of 10,000 cancer patients into nationally approved clinical cancer research protocols. The total initial cost of this program is estimated at $10 million per annum.

Organization of Community Clinical Oncology Program

Since this program will have major objectives pertaining to both the Div. of Cancer Treatment and the Div. of Resources, Centers & Community Activities, it is anticipated that these divisions will work together in coordinating strategies, funding resources, and peer review mechanisms. This coordination will be essential both for integrating community cancer centers into existing groups as well as for the formation of new groups.

The fundamental organization of this program will be a research base (national cooperative group, regional group, contract supported group or major cancer center) that relates to a number of community cancer centers or to individual cancer physicians or to smaller clinics or consortiums. The affiliation of a community cancer center with a research base will be a joint decision. In these decisions consideration would be given to geogrpahic and demographic relationships, feasibility of quality control procedures and the need of an existing research base for an influx of additional patient numbers.

The research base would have a number of vital functions in this program including those provided by an operations office and statistical center and, particularly, the development of research strategies and procedures in early stage that will later be evaluated in larger studies conducted by the group as a whole. Adequate funding must be provided to the research base to meet these responsibilities to the community clinic participants.

A primary responsibility of the community cancer center would be the entry of patients on national protocols conducted through their research group and also to participate with the research base in programs of cancer control. It would also be expected that the community cancer center would have an equal voice in the administration and scientific affairs of the research base. Adequate funding would be provided for these activities either individually for the larger and established community centers or under consortium agreement for smaller or develop-

ing centers. It would not be the purpose of this program to dictate specific treatment, prevention, or control research objectives and projects. These projects would be conceived and planned by the respective research bases and presented for peer review.

Community Cancer Centers

A. A community cancer center may be defined as a single clinic, and/or a group of practicing physicians, a single hospital, or a consortium of clinics or hospitals. In the latter instance cohesion must be demonstrated and there must be a unifying administrative structure. The consortium approach is particularly encouraged when several community cancer centers are serving the same population area.

B. Each funded community cancer center must have a designated and committed multidisciplinary professional team including surgeons, radiation oncologists, medical oncologists, pathologists, and oncology nurses. Appropriate other disciplines may be added, e.g. gynecologic oncologists, pediatric oncologists. One of this group will serve as principal investigator and a representative of each of the remaining subspecialties will serve as coinvestigators. An associate principal investigator will also be named to assure continuity in the event of departure of the principal investigator.

C. Each community center must have a well defined area for administrative activities which will serve as a focus for data management, quality control, and communication. Usually this would be in a hospital or clinic and staffed by a designated administrative person. It is anticipated that this area will be in close proximity to clinical activities so that prompt data transmission can be accomplished as well as on scene eligibility checks and quality control.

D. Each community center must have an established affiliation with a nationally recognized clinical cancer research base, e.g. major cancer center, national or regional cooperative group. Multiple affiliations are discouraged unless they are clearly not conflicting, e.g. ECOG for adult tumors, CCSG for childhood tumors.

E. Each community cancer center must identify the population it serves. Emphasis will be placed on demographic and geographic distribution of community centers. Multiple community centers competing for the same patient population will not be permitted. Consortia of centers serving the same patient population will be encouraged.

F. Each community center must have a demonstrated potential and stated commitment to contribute at least 50 patients per year to approved clinical research protocols active in the center or group with which the community center is affiliated, to protocols of other nonconflicting groups, or to overall national protocols, e.g. for rare tumors. As a general goal, it is anticipated that at least 10 percent of eligible patients will be entered on such protocols, and that they will represent a diversity of tumor types.

G. Each community cancer center must have established well planned procedures for regular communication with the practicing physicians of their region, e.g. education programs, workshops, grand rounds, tumor boards, etc. These can be conducted either independently or in cooperation with the major center or group with which the community center is affiliated.

H. Each community cancer center must have established or well planned programs to meet the human needs of cancer patients in their community, e.g. patient education, cancer rehabilitation, "hospice" programs, etc. Again these may be either dependent or in cooperation with the major center or group with which the community center is affiliated.

I. Each community cancer center must have, either individually or in cooperation with a major center or national group, a plan for evaluating the impact of its community programs.

J. Funding for a community center will be based on established ability to contribute patients to national clinical research protocols and for minimal required cancer control activities. Funds will be available for more extensive cancer control type activities or for evaluation activities if such funding can be justified before peer review. Anticipated total yearly research budget for a center contributing the minimum of 50 patients and without supplemental cancer center control activities would be $50,000. The anticipated indirect cost would be minimal. The budget would be increased proportionately for centers capable of greater case contributions. Allowable items in the budget would be for personnel engaged in data handling and study assistants, supplies and services directly related to study activities (e.g. processing and sending material for pathology review, processing and sending port films for radiation therapy quality control), travel to meetings directly related to study activities, and support for cancer control activities. Physician compensation would be allowable only for time spent on the projects other than clinical care and should be documented. Total funding as well as allowable staff salaries would be increased proportionately for peer review approved cancer control activities. Funding would be allowed for five years. Developmental grants up to a two year period could be allowed for community cancer centers with a clearly established potential for case contribution that had not been documented by past performance. These grants could be extended for an additional three years by NCI staff review without site visit if adequate case contributions could be documented during the initial two years.

Committee members participating in the session were, in addition to Moertel, Stephen Carter, DRCCA Board chairman; John Durant, Lillian Gigliotti, Her-

bert Kerman, Harvey Lerner, and Edward Moorhead. The DRCCA Board will be asked next week for concept approval of the program, which probably will be supported through cooperative agreements. DeVita suggested that workshops may be scheduled to further refine the details before an RFA is issued.

NCI CONTRACT AWARDS

Title: Incorporation of several alteration/renovation/maintenance/upgrading projects at the Frederick Cancer Research Center, modification

Contractor: Litton Bionetics, $423,192.

DCT BOARD DELAYS ACTION ON PROTEIN INDEX, FAILS TO BACK COW EYE STUDY

The Human Protein Index proposal advanced by Norman Anderson of Argonne National Laboratory (described to the National Cancer Advisory Board earlier this year—*The Cancer Letter,* Aug. 7) generated "enthusiasm"—sort of—when presented to the Div. of Cancer Treatment Board of Scientific Counselors.

Anderson specifically asked the DCT Board for concept approval of two projects—a two dimensional electrophoretic mapping of human lymphocytes and leukemic cells, and a study of cancer related alterations in the proteins of human body fluids. Anderson's description of the two proposals:

Proposal I: Analysis of Lymphocytes and Leukemic Cells: Methods for mapping cellular proteins (including the extremes of pI all the way out to include the histones) have been applied to human lymphocytes. Eighteen sets of proteins have been delineated which may be grossly affected by externally applied chemical and physical agents including tumor promoters and interferon. The map positions of the major mitochondrial proteins have been determined, and the synthesis of the set shown to be coordinately controlled, i.e., the synthesis of all of them may be shut off by agents affecting mitochondrial function. This work suggests that many structural genes are coregulated and are switched on and off in sets or groups. Differences between different cell subtypes separated using the cell sorter have been found, and new proteins seen in cells from mononucleosis patients.

A start has been made on the quantitative description of various types of leukemic cells, and the results of this work, and the relationship of the transformation-associated changes to changes produced by phorbol esters presented. The fundamental notion of this work is that mere description of new or missing proteins is insufficient. Rather it is important to be able to relate changes seen to specific subcellular locations (mitochondrial, cell surface, etc.), to coregulated protein set (especially when the set is a derepressed one normally present in early human development), to function (are the proteins known enzymes, phosphoproteins, glycoproteins, etc.). It is further important to be able to take findings into the clinic in the form of specific tests for specific proteins found to vary. This means the routine production of antibodies which may also be used to confirm the association of a specific protein with a cell type or intracellular location.

This study is in many respects a prototype of future studies on other tissues and cancers. While the center of gravity of this effort is now Argonne, close collaboration with the Mayo clinic is being established with the aim of both providing samples and of gradually putting in place in a clinical setting all parts of the system which are found useful as fast as they are perfected.

Proposal II: Cancer-related Alterations in Body Fluid Proteins: During the exploratory studies of Phase B, the map locations of all of the major proteins of human plasma were found, and methods for mapping the proteins of urine, prostatic fluid, and saliva developed. The majority of proteins of urine and prostatic fluid are not plasma proteins and have not been previously described. Characteristic changes have been noted in samples obtained from cancer patients (breasts, lung, renal cell, and prostatic cancer) which should now be systematically explored.

In parallel studies at Mayo, the methods developed are being adapted and evaluated in a clinical setting. The major barrier at present is the lack of quantitation for nonradioactive samples. Intensive efforts at Argonne should solve this problem within four months. The objective is the systematic exploitation of observations already made, and the discovery of additional quantitative and qualitative changes in body fluid proteins associated with cancer, so that each potential indicator is evaluated in a systematic manner.

Anderson tried to convince the Board of the two studies' importance to cancer treatment.

While many of the proteins found to differ from normal ones may eventually turn out to be useful for cancer detection it is our view that the near term uses are in cancer treatment and more specifically in the evaluation of cancer treatment. The analytical studies to be done are on samples from patients with large numbers of leukemic cells or large tumor masses.

In leukemia, duplication of genes related to drug resistance may produce increased amounts of specific protein gene products which can be measured. Hence mapping of leukemic cells may indicate when drug resistance is developing. (Evidences for gene duplication in drug resistant cells in culture have already been found). Further, subtypes of leukemia may be found by mapping which are initially differentially drug resistant.

In addition, when molecular markers of different cell types including leukemic cells are known, mapping of whole lymphocyte populations may provide a convenient method for determining the number of leukemic cells present. Immunoassays based on markers discovered during this work may provide an even more sensitive method for estimating the number of leukemic cells remaining after treatment.

Body fluid cancer-related proteins are also studied initially in patients with large tumor loads and may prove useful methods for estimating tumor mass. Some of the proteins may be tumor cell products, others may be secondary to the disease. It is important to discover how these vary during treatment. In addition preliminary studies have shown new proteins to appear in the urine of a lung cancer patient during radiotherapy.

We would like to explore the possibility of detecting and measuring tumor destruction by monitoring tumor cell proteins in blood or urine, and hence of finding out whether a drug or radiation is killing tumor cells. Should this technique prove to be sensitive and effective, small drug doses might be given initially to find out which are effective, before using much larger therapeutic doses.

Further, trials of new drugs in man might be undertaken with more confidence if past preliminary indication of effectiveness could be obtained. Exploration of the use of potential indicators discovered during this work for cancer detection will be a longer range effort.

Board members were not convinced. "I see the bulk of this in diagnosis," Daniel Bolognesi said. "You're asking us if treatment should make some small contribution."

"I view treatment related following of markers as only a small part of [human protein indexing]," Sydney Salmon commented. "I would hate to see you spend most of your time on that. I view that as relatively trivial."

"I see this as a major advance in diagnosis," DCT Acting Director Bruce Chabner said. "I'm puzzled why you start with treatment. . . . The most important uses for the system would be for biologic and diagnostic reasons."

Anderson said he was advised by NCI Director Vincent DeVita, after the presentation to the NCAB, to address the DCT Board. "That's why we're here."

"Why do you need NCI resources?" Board Chairman Samuel Hellman asked.

"The Dept. of Energy (which supports Argonne) is not the most stable base known to man," Anderson replied, a reference to the Reagan Administration's announced intention of drastically reducing the department's funding and perhaps doing away with it. "It was not our intention initially to seek other support. We intended to do it all with DOE money. But we've been told to look for support from industry and other agencies."

Hellman said he "sensed the Board's interest" in Anderson's work. "I think we should express our enthusiasm to Dr. DeVita and ask his guidance on how NCI support should be applied. Since he sent this to DCT, I assume there is some method in his madness."

No further action was taken by the Board on Anderson's proposals, a better fate than met another project which the Board considered even more definitely within the realm of cancer biology and thus not deserving DCT support—a proposal "to use cows in evaluation of treatments for carcinomas."

The proposal stemmed directly from the Laboratory of Immunobiology in the Div. of Cancer Biology & Diagnosis and was written by the late chief of that lab, Herbert Rapp. Rapp's death a few days before the proposal was presented to the Board obviously affected the outcome.

Rapp's proposal was based on work in his lab and on studies by Stephen Kleinschuster in Utah in which intradermal injections of a mixture of x-irradiated line 10 tumor cells and killed emulsified BCG produced startling results in treating "cancer eye" in cows. Rapp's studies involved treatment of guinea pigs with implanted tumors with surgery and immunotherapy.

The proposal would have been a controlled trial in which 30 cows with stage 2 squamous cell ocular carcinoma would be treated with surgery alone, and 30 with surgery plus immunization. The estimated cost was $130,000.

Board member Sharon Murphy suggested that the study would be more appropriately supported through the Biological Response Modifiers Program with a grant. BRMP Director Robert Oldham agreed "it is an excellent model which needs to be pursued," and recommended grant support.

However, only Bolognesi, Philip DiSaia and Alexander Fefer voted to issue a program announcement which would request grant proposals without committing DCT funds. Investigators still may submit R01 applications.

The Board gave concept approval to one new project which will be supported by contract:

Quality assurance program for hyperthermia. Estimated first year award, $200,000, five years. The narrative:

Interest in clinical applications of hyperthermia alone, with radiotherapy, and with chemotherapeutic agents for cancer treatment has increased markedly and chaotically in the past few years. The physical and physiological problems associated with heat generation, heat transfer, and thermometry are enormous. If the potential role of hyperthermia is to be evaluated expeditiously, it is essential that a mechanism similar to that provided by the Radiological Physics Center be established that will provide quality assurance in hyperthermia for phase 1, 2, and 3 studies. This contract will be closely coordinated with other hyperthermia projects involving clinical applications of hyperthermia.

The Board gave concept approval to nine projects which will be renewed noncompetitively:

—Intralesional immunotherapy, Univ. of Texas Health Science Center (San Antonio), estimated first year cost, $89,000 or less.

—Adoptive cellular immunotherapy in animals, Univ. of Washington, estimated first year cost, $216,000 or less.

—Intrapleural BCG after primary surgery for lung cancer, Albany Medical College, $135,000 (for one more year instead of two as requested).

—Intratumoral BCG immunotherapy prior to surgery for carcinoma of the lung, Yale Univ., $90,000, one year.

—Malignancy as a cause of death in beagles given whole body radiation during development, FDA, $250,000 first year cost, five years.

—Furnish human malignant tumor specimens and various cells, HEM Research, $366,000, three years.

—Radiation induced myelogenous leukemia, Dept. of Energy (Oak Ridge), $170,000, five years.

—Interaction of ionizing and nonionizing radiation, DOE (Oak Ridge), $156,000, five years.

—Risk estimates for radiation induced cancer and extrapolation from mouse to man, DOE (Oak Ridge), $126,000, five years.

The Board first disapproved the concept of renewing the contract with Mt. Sinai for chemoimmunotherapy of acute myelocytic leukemia for one more year at a cost of $121,000, but relented when Cancer Therapy Evaluation Program Director John MacDonald argued that this would be leaving un-

evaluable a study which essentially has been completed. The Board agreed to withhold a decision until its February meeting, when a decision by the technical review committee will have been completed. Board members felt the study had been too expensive and patient accrual too slow.

Also disapproved was renewal of a BCG immunotherapy study in patients with superficial bladder carcinoma by Memorial Sloan-Kettering, at a cost of $120,000 for one more year.

Three contracts recommended for termination by the review committee were brought to the Board's attention—evaluation of adjuvant BCG in melanoma patients, by UCLA; specific and nonspecific immunotherapy as an adjunct to chemotherapy in soft tissue sarcoma, by UCLA; and evaluation of levamisol as a therapeutic adjunct in squamous cell carcinoma of the head and neck, by Memorial Sloan-Kettering.

The Board approved a no cost extension for one year of a phase 3 study of total parenteral nutrition in advanced measurable small cell anaplastic carcinoma of the lung at five institutions—Univ. of California (Irvine), Univ. of Iowa, Univ. of Florida, New York Univ., and Ontario Cancer Institute.

RFPs AVAILABLE

Requests for proposal described here pertain to contracts planned for award by the National Cancer Institute unless otherwise noted. Write to the Contracting Officer or Contract Specialist for copies of the RFP, citing the RFP number. NCI listings will show the phone number of the Contracting Officer or Contract Specialist who will respond to questions. Address requests for NCI RFPs to the individual named, the Blair Building room number shown, National Cancer Institute, 8300 Colesville Rd., Silver Spring, Md. 20910. RFP announcements from other agencies reported here will include the complete mailing address at the end of each.

RFP NCI-CM-27510-26

Title: *Cancer Therapy Evaluation Program Information System*

Deadline: *Dec. 3*

The Cancer Therapy Evaluation Program, Div. of Cancer Treatment, NCI, is seeking an organization having capabilities and facilities to develop and maintain an automated, computer based CTEP information system, and to transfer and maintain an automated, computer based drug distribution and protocol monitoring system.

CTEP has the mission and the organizational scope to manage the research directions of all aspects of clinical cancer treatment including the sponsoring of clinical trials involving investigational antineoplastic agents, through the approval of clinical protocols to CTEP sponsored contractors, grantees and other qualified investigators. The proposed CTEP-IS/-DDPMS will support both the information needs of the CTEP missions and the requirements of the Food & Drug Administration and the Drug Enforcement Administration by providing comprehensive information management during the protocol review process, by providing data on the objectives of both active and completed protocols, by providing data on the results of active and completed protocols and by the distribution and monitoring of investigational antineoplastic agents.

The CTEP-IS will provide scientific and administrative information on: 1) treatment modalities (e.g. drugs, biological response modifiers, radiation and surgery), 2) diseases, 3) protocols and 4) investigator teams through the development/design by the contractor of protocol, drug, disease and investigator data bases.

The DDPMS will provide for the transfer and maintenance of the computerized data base system for the distribution and monitoring of investigational antineoplastic agents to qualified investigators through an established automated data sysem which is used to verify the accuracy of requests for drug supplies made by investigators.

As this project will support a large biomedical research mission, the contractor must be experienced in the management of clinical cancer data, have expertise in medical terminology, etc. The scope of the project involves daily contact with both CTEP staff and NCI sponsored investigators. The data bases and management systems to be utilized in this project will be maintained in the Div. of Computer Research and Technology, NIH computer facilities. Additional government furnished space will also be made available for part of the DDPMS function, The government will supply two Lexitron word processors with printers for use as computer terminals and four CRT terminals for the DDPMS.

It is anticipated that one award will be made as a result of this RFP and that an incrementally funded contract will be awarded for a period of 37 months. The RFP in part represents a recompetition of the project "Drug distribution and protocol monitoring system." The CTEP-IS procurement is set aside 100 percent for small business with a size standard of annual volume of business of $4 million a year or less over the past three years.

Contract Specialist: Carolyn Swift
RCB, Blair Bldg. Rm. 228
301-427-8737

The Cancer Letter _Editor Jerry D. Boyd

Published fifty times a year by The Cancer Letter, Inc., P.O. Box 2370, Reston, Virginia 22090. Also publisher of The Clinical Cancer Letter.