THE CANCER LETTER

Vol. 6 No. 45

Nov. 14, 1980

Subscription $125.00 per year

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GOP SWEEP TAKES OUT TWO OLD FRIENDS, BUT REAGAN SPOKESMEN SAY HE SUPPORTS CANCER PROGRAM, NIH

The election of Ronald Reagan to the Presidency and a Republican majority to the Senate—plus the loss of old friends Warren Magnuson

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In Brief

ACS AWARDS THREE MORE GRANTS FOR PREVENTION RESEARCH; AHF ESTABLISHES CHAIR IN NUTRITION

SPECIAL INSTITUTIONAL grants to stimulate research into cancer cause and prevention have been awarded by the American Cancer Society to Johns Hopkins Univ., Univ. of Southern California, and UCLA. The grants will be supported by the ACS special donors fund initiated by ACS VP Frank Rauscher. At Hopkins, Ernest Bueding and Paul Talalay will direct a study focusing on the hazards of medical drugs on a five year grant totaling $930,000. The USC group, headed by Brian Henderson and Charles Heidelberger, will attempt to find out whether certain forms of cancer are related to specific occupational, drug or other environmental exposure. They will be funded at $200,000 a year for five years. Murray Jarvik will head the UCLA study, a smoking research and prevention program. He will recieve a one year award of $56,000 but it is anticipated this will be a five year study. . . . **ERNST WYNDER**, president of the American Health Foundation, announced AHF has received a $1.5 million grant from the Charles A. Dana Foundation to establish a chair in nutrition. Wynder, who feels many forms of cancer along with heart disease and stroke stem largely from the "excessive diet of the industrialized west," said he hopes to attract an internationally recognized scientist to the chair "who can spearhead our nutritional research and its application to control the epidemic of chronic disease which is prematurely killing so many in our country and abroad." . . . **"POPULATIONS AT** Low Risk of Cancer," a report on cancer incidence in white Protestant clerics, Mormons, Seventh-Day Adventists and Hutterites, is published as a monograph in the November issue of the *Journal of NCI.* Ethnic group studies are included, on Japanese, Chinese, Filipinos, and native Hawaiians in Hawaii; Chinese and Japanese in California; and Alaskan Indians, Eskimos, and Aleuts. A limited number of courtesy copies of the November *JNCI* is available from NCI, Office of Cancer Communications, Bethesda, Md. 20205. . . . **NATIONAL PROGRAM** Committee of the 13th International Cancer Congress has established the preliminary program for the 1982 meeting in Seattle. Sixty topics will be offered daily, including cancer prevention screening and early detection, pain and symptom control in management of cancer patients, childhood tumors, nutrition in cancer etiology, models for community cancer care, and pathology of environmental cancer. Enrico Mihich is chairman of the Program Committee.

MATHIAS, HATFIELD EMERGE AS STRONG FIGURES ON KEY SENATE SUBCOMMITTEE

(Continued from page 1)

and Birch Bayh—has led to widespread conjecture that the National Cancer Program will be in trouble when the conservative GOP victors take over in January.

One rumor which surfaced around the country last week speculated that Reagan would attempt to phase out NCI and turn over its $1 billion budget to the American Cancer Society and the pharmaceutical industry.

Reagan spokesmen quickly disavowed that story, expressed strong support for the National Cancer Program and NIH, and noted that the President-elect has always supported research into the problems of aging and chronic disease.

While there is no question the congressional changes pose a threat to the strong support the Cancer Program has enjoyed on Capitol Hill, a look at who will hold power on key committees indicates that that support may still be there. Here is how the situation shapes up:

• **The White House.** Except when Richard Nixon helped win approval for the National Cancer Act of 1971 and asked for and received a supplemental appropriation of $100 million for NCI in FY 1972, no President has gone out of his way to help the Cancer Program. Nixon, Gerald Ford and Jimmy Carter invariably submitted budget requests no higher than the previous year's appropriation for NCI, and in some years less.

The President's Cancer Panel was able to exert some influence with the Nixon and Ford Administrations, none with Carter. Even the slightest inclination by President Reagan to listen to the Panel, which was established to advise the President on the Cancer Program, would be an improvement.

The Carter Administration was exasperatingly slow at first in filling vacancies on the Panel and National Cancer Advisory Board; the situation improved markedly when Patricia Harris became HHS secretary. Harris, of course, will be out as of Jan. 20, and so probably will be Julius Richmond, assistant secretary for health and surgeon general.

How far down into the Public Health Service the new broom will sweep is the big question at the moment. The director of NCI and the director of NIH are Presidential appointees and thus are vulnerable. However, Presidents usually have considered those as scientific positions and not subject to patronage. Nixon was roundly criticized when he, for no good reason, fired Robert Marston as NIH director in 1972.

Vincent DeVita has been NCI director only since last July (acting director since Jan. 1). His appointment had the broadest support of the scientific community and his NIH colleagues, his qualifications for the job unquestioned. There would be absolutely no justification at all for replacing him now other than blatant abuse of patronage.

Until DeVita is assured of staying on, he probably will have some difficulty in filling the important positions still open—his own deputy and directors of the Div. of Cancer Cause & Prevention, Div. of Cancer Treatment, Div. of Resources, Centers & Community Activities, and Div. of Extramural Activities. Few would take those jobs without knowing if DeVita is going to continue as NCI director.

DeVita has selected his new executive officer, but that has to be approved by Harris.

William Walsh, chairman of Reagan's Health Advisory Committee, said that it would be "absolutely out of the question" for the new Administration to phase out, or even diminish the roles of NCI and NIH. To the contrary, Reagan opposes the increased oversight of NIH which is one of the features of Congressman Henry Waxman's bill on biomedical research authorization. That bill, which has passed the House, would terminate each of NIH's institutes every three years unless reauthorized by Congress. It also contains specific maximum dollar authorizations for each institute.

Walsh said Reagan would prefer Sen. Edward Kennedy's bill, which has passed the Senate, "although we would rather write our own." Kennedy's bill omits dollar figures, does not require reauthorization of each institute, but does create a new biomedical research council which Reagan does not particularly like.

NIH funding will be continued in the Reagan Administration, Walsh said, although industry will be encouraged to do more cancer research on its own and become more involved in prevention and education.

• **The Senate.** The loss of Magnuson and Bayh is particularly hard for Cancer Program advocates to swallow. Magnuson cosponsored, as a young Congressman, the act which created NCI in 1937. As the chairman of the Senate Labor-HEW (now HHS) Appropriations Committee, and later chairman of the full Appropriations Committee, he has always seen to it that NCI's budget was increased more than the White House has requested and more than the House has voted.

Bayh always voted in committee for increased Cancer Program funds. He became increasingly interested in the program with the illness of his wife, Marvella. When she finally succumbed to breast cancer, Bayh became perhaps the most eloquent and appealing national spokesman for the Cancer Program. It was at his insistence that the subcommittee added $65 million to the 1980 appropriations bill. With Magnuson's adroit handling of the House-Senate conference, he and Bayh were able to retain that full amount, giving NCI its first

billion dollar appropriation.

Another major loss on that subcommittee is the retirement of Sen. Richard Schweiker, the topranking Republican member and also a steady supporter of the Cancer Program. If Schweiker had stayed on, he would be in line for the chairmanship.

The Cancer Program still has powerful friends on the GOP side of the subcommittee. Charles Mathias, probably the most liberal Republican in the Senate, bucked the tide and won reelection. He is the senior GOP member of the subcommittee with Schweiker's retirement. Mathias probably could be chairman when the new Senate is organized, if he wants it. However, he has been topranking Republican on the HUD-Independent Agencies Subcommittee and could elect to take that chairmanship. He also could become chairman of the DC Subcommittee, and that could prevent him from taking over Labor-HHS.

Mark Hatfield is next in line. He is a moderate, somewhat to the right of Mathias but also a consistent backer of the Cancer Program. Hatfield is due to become chairman of the full committee, but could decide to head the subcommittee too, as Magnuson has done.

The other two Republicans on the subcommittee are Lowell Weicker, a moderate, and Harrison Schmitt, a fiscal conservative but, like Weicker, a friend of the Cancer Program. All of the Republican members, in fact, voted for the $1 billion NCI budget while only Magnuson and Bayh among the Democrats voted for it. It would not appear that the Cancer Program has anything to fear from a Republican controlled Appropriations Committee.

It could be a different situation with the other key Senate committee, the Subcommittee on Health & Scientific Research of the Committee on Labor & Human Resources. That is Kennedy's subcommittee, and he will surrender it either to Orrin Hatch or Gordon Humphrey, both conservatives. Schweiker was also the topranking Republican on this subcommittee, followed by Jacob Javits, who was defeated.

Hatch is next in line, but he will be the ranking Republican on two other subcommittees and could opt to head one of them instead.

Although neither Hatch nor Humphrey has been outspoken in support of the Cancer Program, neither has opposed it.

On the Democratic side of the subcommittee, Gaylord Nelson—who cast one of the two votes against the National Cancer Act of 1971 and has been a critic of the program—was defeated for reelection.

• **The House.** Democrats retained control and thus the changes will not be quite so traumatic, with committee chairmanships not changing sides. But there will be important changes, particularly in the Subcommittee on Health & Environment and its parent Committee on Interstate & Foreign Commerce.

Waxman was reelected and presumably will continue as chairman of the subcommittee. But moderate Democrat Richardson Preyer, who was Waxman's rival for the chairmanship last year after Paul Rogers retired, was defeated for reelection. More significantly for the Cancer Program, Andrew Maguire, whose amendments to the Cancer Act two years ago changed the makeup of the National Cancer Advisory Board and mandated increased emphasis on prevention, lost his bid for reelection. It was Maguire who insisted on the provision in the Waxman bill this year which would require NCAB approval of nearly all contracts, driving NCI staff to predict the demise of the contract mechanism.

There are those among Cancer Program backers who rejoiced at Maguire's defeat, feeling his work has wrought more mischief than benefits. But Maguire considered himself an ardent friend of the program; those who feel that an increased emphasis was needed in epidemiology and in environmental and occupational causes of cancer will agree.

Retirements and election defeats decimated the subcommittee. John Murphy, caught in the Abscam scandal, was defeated. Robert Satterfield retired, as did Harley Staggers, chairman of the full committee. Samuel Devine, topranking Republican on the full committee, was defeated, and Tim Lee Carter, ranking GOP member of the subcommittee, retired. John Dingell, Michigan Democrat, will be the new chairman of the full committee, but the second ranking Democrat, liberal Lionel Van Deerlin, was defeated, as was moderate Bob Eckhardt. In fact, six of the top seven Democrats on the full committee retired either voluntarily or at the hands of the voters.

Only one departure will be made from the other House subcommittee crucial to the Cancer Program, the Appropriations Subcommittee on Labor-HHS. Edward Patten, colorful New Jersey Democrat who regaled hearing audiences with tales of his personal experiences in health care and that of his constituents, retired. All other members will return, with William Natcher remaining as chairman and Robert Michel as the ranking Republican. David Obey, frequent Cancer Program critic but an increasingly powerful and respected member, moves up to the third ranking Democratic position on the subcommittee behind Natcher and Neal Smith.

Reagan's victory and the sweeping changes in Congress probably mean that the lame duck session due to start next week will be short and that there probably will not be a conference on the Kennedy and Waxman bills, killing the legislation this year. The Cancer Act will remain as it is, except with no dollar authorization, which will suit a large portion of the program's constituency just fine. They won't have to endure the features of both bills perceived as obnoxious; on the other hand, they will not receive the benefits in hard-fought-for amendments, such as center grant authorization for five years and the ear-

mark for cancer center core grants.

As Jimmy Carter might say, you can't win them all.

DCBD APPROVES RECOMPETITION CONCEPTS INCLUDING CELL BANKS, CONTRAST AGENTS

Recompetition of five projects with an estimated first year award total of more than $1 million has been approved by the Board of Scientific Counselors of NCI's Div. of Cancer Biology & Diagnosis.

The Board considered DCBD staff requests for concept approval of the recompetitions at its October meeting; members later communicated their responses to Board Chairman David Korn. Although all five were approved, members recommended a "substantial" reduction in one and expressed reservations about two others.

The projects, with DCBD staff narrative descriptions and the Board's responses:

Support contract for the Laboratory of Immunodiagnosis for research in mice and rats. Estimated first year award, $225,000, on a three year contract. Present contractor is Litton Bionetics. The narrative:

The available evidence in support of an in vivo role of NK cells relates almost entirely to transplantable tumors and established cell lines of tumors. There has been very little attention devoted to the very important and more clinically relevant issue of the roles of NK cells in resistance against induction or subsequent growth of primary tumors. A major approach to this question is to obtain mice or rats with selective deficiencies in NK activity and to examine the frequency of spontaneous or carcinogen-induced tumors relative to that in animals with normal NK activity. However, there are few methods available for obtaining such a comparison.

Our laboratory, with the aid of this contract, has been exploring several possibilities, to determine which would be suitable for the long term tumor incidence studies:

a) Beige mice, which are the result of genetic point mutations, have been found to have low levels of NK activity when compared to congenic normal mice. In parallel, we have found that in vivo clearance from the lungs of radiolabeled tumor cells is impaired in beige mice. This makes them a promising model; however, the deficit in NK activity is not absolute and can be overcome in part by stimulation in vitro or in vivo with interferon. Therefore in vivo tumorigenesis studies in this system, although suggestive, may not be sufficient for a test of the in vivo role of NK cells.

b) In genetic studies performed under this contract, F_1 hybrids were produced by mating of inbred mice with high and low NK activity. In most combinations, high NK activity was dominant and complementation was seen with hybrids of two low NK strains. However, F_1 hybrids from SJL and A/J parents, both with low NK activity, had low NK activity. This suggested that the two strains shared genes contributing to low NK activity, and in further genetic crosses, this was confirmed and appeared to be related to one locus. Further breeding studies are in progress in attempts to place this locus on other genetic backgrounds, e.g. beige or nude or other strains with a tendency for spontaneous tumor development, in order to obtain mice with more profound and selective deficiencies in NK activity, which could then be compared for tumor incidence with higher NK mice with the same genetic background.

c) Mice treated with estradiol implants have been shown to have a persistent and profound deficit in NK activity and in the ability to clear intravenously inoculated tumor cells. These mice had relatively normal functions associated with T cells and macrophages, and thus the treatment appears quite promising.

d) Urethane treatment of A/HeJ mice has been shown to induce a high frequency of lung tumors and is paralleled by depression in NK activity and in in vivo clearance of labeled tumor cells from the lungs. In contrast, C57BL/6 and some other strains of mice that are resistant to carcinogenesis by urethane have also been resistant to the depression in in vitro and in vivo NK activity. Thus, these data suggest an important role for NK cells in resistance to primary carcinogenesis by urethane. However, a limitation to these experiments and those with estradiol is that some other effects, not directly related to NK cells, could be responsible for the differences in tumor growth. To overcome this concern, it would be desirable to examine the effects of selective reconstitution of treated animals with an enriched population of NK cells. Whereas this is not technically practical for mice, because of the lack of adequate procedures for enrichment of NK cells, this could be done easily in rats. We are therefore planning to reproduce some of these studies in rats, in order to allow a comparison between NK-reconstituted and non-reconstituted animals.

Continuation of these in vivo studies, by means of a recompetition of this contract, is needed to carry out this important project. These studies will require adequate facilities for long term maintenance and manipulation of large numbers of mice and rats. Such facilities are unavailable intramurally and without this support contract the project, which is well under way and which has been quite productive, would have to be abandoned. Completion of the project offers the likelihood of obtaining substantial new information on the in vivo role of NK cells and their participation in immune surveillance against tumors.

The Board's response, as summarized by Korn:

"The Board approves the concept with respect to the need for substantial numbers of small animals for the NK cell research program of Dr. (Ronald) Herberman and his associates. We wish to emphasize, however, that the RFP should be drawn carefully to ensure that there is not commingling of contract supported research."

Production/procurement and testing of contrast agents for use in clinical ultrasonic diagnosis. Estimated first year award of $150,000. Present contractor is the Univ. of Kansas, although the project also will expand on work being done with grant support at Stanford Univ. The narrative:

Because of the established success in the use of contrast materials for x-ray imaging it was suggested to the Diagnosis Program by the Diagnostic Radiology Committee in 1977 that similar benefits might be found with appropriate ultrasound contrast materials. An RFP was issued in 1977 to seek "Development of Contrast Agents for Use in Clinical Ultrasonic Diagnosis." A contract was established with Univ. of Kansas to carry out such a study. That study is investigating various soluble chemical substances and small suspended solid particles for their effect on ultrasonic imaging of tumors.

A number of compounds was selected and categorized ultrasonically by measuring the speed of sound, density and acoustic impedance in their solution as a function of concentration. Two compounds, sodium citrate and calcium gluconate, were chosen because of their ability to alter speed of sound and acoustic impedance by an appreciable amount and because of their known pharmacological defects. Preliminary toxicity studies were performed and the optimum combination of these two compounds was determined. Organ distribu-

tion studies indicate a concentration of these two compounds in the kidneys.

The optimum combination of these two compounds was injected intravenously into anesthetized dogs. Enhancement of echoes of canine renal cortex was demonstrated. These experiments indicate that introduction of appropriate aqueous solutions produces changes in scattering and reflection properties of tissue.

In another approach solid microspheres were prepared, utilizing a variety of compounds including gelatin, collodion and collagen. Measurements of the ultrasonic backscatter from these solid microspheres in suspension and from a standard erythrocyte suspension were performed. When normalized to a standard particle size and concentration, the backscatter from collagen was about 30 cB above erythrocytes. The collagen microspheres were chosen for preliminary in vivo canine experiments. As with other particles below 5 microns in diameter injected into the body, the collagen microspheres are taken up by RES cells, especially in liver and spleen. In vivo canine experiments using commercial diagnostic equipment (real time linear array at 7 MHz) demonstrated enhanced backscatter from liver after intravenous injection of the microspheres.

In a separate study at Stanford Univ., a portion of an NCI grant has been the support for preliminary studies using gelatin encapsulated nitrogen microbubbles as an ultrasonic contrast agent in animal studies. Intraarterial injection of the 80 micrometer diameter gelatin bubbles filled with nitrogen gas provided an improved tumor visualization in rabbit V2 tumor studies. The improved visualization resulted from rim enhancement due to bubble accumulation which persisted for several minutes until the bubbles dissolved.

The current extramural Diagnosis Program consists of approximately 90 grants and 60 contracts. The research can be divided into eight categories: biochemistry, immunodiagnosis, cytology, pathology, radiological imaging, non-radiological imaging, nuclear medicine and multidisciplinary. The non-radiological imaging includes 11 grants and two contracts covering ultrasound, thermography, and heavy ion beam imaging studies; specifically in ultrasound, there are six grants and two contracts with a total current funding of approximately $700,000. The proposed work would expand the total effort in an area not receiving much research attention at the present time. There is a clear need for diagnostic imaging procedures which do not use x-rays.

The project [being recompeted] involves the following tasks to be performed by the contractor chosen after peer review.

1. Produce or procure appropriate gas-filled microbubbles of appropriate size.
2. Produce or procure appropriate tumor-bearing animals.
3. Test the contrast characteristics of the microbubbles using a variety of ultrasonic signals, with a variety of bubble sizes, concentrations, rates of administration, sites of administration and other combinations of conditions as necessary to provide as much useful information as possible.
4. Perform acute and chronic toxicity studies on promising microbubble preparations.

The actual detailed approaches taken will be left to the contractor and will be summarized in the workscope of the contract.

The Board approved the concept as proposed.

Morris hepatoma resource. Estimated first year award of $250-300,000. Harold Morris, Howard Univ., has been providing this resource for 13 years under an R01 grant. The narrative:

Initial review groups at the NIH, because of a bias they hold that resources should be supported by contracts, have made it increasingly difficult for NCI to fund any kind of resource through the grant mechanism. The Tumor Biology Program made a careful study of the need for Morris Hepatomas in the research community and the need for a centralized resource. The study confirmed the need for a centralized resource, but only 11 tumors were regarded as important to the scientific community. The latest study section reviews of Dr. Morris' resource clearly established as a high priority the development of techniques to freeze these tumors without loss of viability or unique properties. We are now reviewing the concept that a Morris hepatoma resource should be supported by NCI as a contract.

The proposed project would (1) maintain up to 1,200 synergistic rats of the Buffalo strain, (2) provide technical staff capable of maintaining, transplanting and monitoring the properties of Morris hepatomas, (3) provide the technical and professional staff required to develop procedures for freezing Morris hepatomas without losing viability or properties characteristic of each tumor type, (4) supply rats carrying Morris hepatomas to extramural laboratories requesting these tumors for research purposes and (5) provide a testing service to extramural laboratories which maintain their own tumors which would confirm whether or not these tumors are the same or different from those maintained by this central facility.

The Board's response:

"The Board approves the concept of supporting a resource for maintaining a stock of rats bearing the 11 Morris hepatomas that are proposed. We do not believe, however, that the contract mechanism should support the proposed research and development in cryopreservation, nor do we believe that an overly elaborate testing program can be justified. Accordingly, it is our recommendation that the total annual cost for this resource should be very substantially reduced from that projected, and we strongly recommend that the resulting savings should be allocated for research support in tumor biology."

Repository and distribution center for cell lines useful in research in tumor immunology. Estimated cost is $200-300,000 per year. Salk Institute is the present contractor. The narrative:

For the past eight years, the program has supported a cell bank and distribution center at the Salk Institute. Originally, this resource focused upon the distribution of murine plasmacytoma tumors but with time has grown to include a variety of lymphoid, macrophage, fibroblast and hybridoma lines as well. Currently this bank, headed by Mel Cohn, contains over 100 individual lines and receives more than 1,200 requests for lines per year. Several circumstances have led us to propose changes and expansion of this current resource. First, the current operation does not includes lines of human origin and there are many such lines in increasing use and demand. Second, the wide application of somatic cell hybridization has greatly increased the demand for cell lines useful in fusion and has created a new large category of useful cell lines (i.e. hybridomas). LThird, as the original contract was awarded to an unsolicited proposal, regulations require that further renewal be on the basis of open competition.

The rationale for supporting such a resource is that it provides several advantages to NCI and to the immunological research community. These include (a) general access of all qualified investigators to the cell lines of interest, (b) application of uniform standards of quality control, (c) cost savings by minimizing efforts at generating duplicative lines and (d) consistency and comparability of results from different laboratories using cell lines from a single source.

Cell lines for inclusion in the resource would include but would not be limited to the following categories.

1. Cell lines useful in the study of B (bursal equivalent derived or bone marrow derived) lymphocyte development and function with particular regard to their role in the immunobiology of tumors.
2. Cell lines useful in the study of T (thymus dependent or thymus derived) lymphocyte development, and function with particular regard to their role in the immunobiology of tumors.
3. Cell lines useful in the study of monocyte/macrophage development and function with special regard to their role in the immunobiology of tumors.
4. Cell lines useful in the study of immunoglobulin structure, synthesis and secretion and/or useful in somatic cell hybridization including myelomas and their variants.
5. Somatic cell hybrids (hybridomas) useful in tumor immunology with special reference to those producing monoclonal antibody useful in the identification of leucocyte subpopulations and in the identification of tumor associated antigens.
6. Cell lines useful in the study of immune effector mechanisms such as lines of target cells.

Specific lines for inclusion would be determined by consultation between the project officer, contractor and ad hoc advisors. The contractor shall be responsible for quality control of the cell lines and this will involve periodic assessment of characteristics such as viability, genotype, phenotype and contamination with other cell lines and microorganisms. A catalog of available lines including descriptive information shall be prepared and updated twice yearly. This catalog shall be available to investigators upon request.

A charge to recipients would be levied to defray part of the cost, with chargebacks estimated at about 25 percent of the total cost.

The Board's comments on this project are included with those on the following (see below).

Human tumor cell line bank for immunodiagnostic studies. Estimated first year award of $175,000 on a five year contract. Present contractor is Sloan-Kettering Institute, with Jorgen Fogh as principal investigator. The narrative:

Cell lines to be maintained in the cell bank will be derived from a variety of human neoplasms. These may include carcinomas of stomach, liver, colon, pancreas, esophagus, lung, breast, ovary, cervix, endometrium, thyroid, bladder, kidney, prostate, bone and brain, melanomas, lymphomas, osteogenic sarcomas, Wilm's tumors, chronic myelogenous leukemias, glioblastomas and possibly others including normal human epithelial lines, to be ascertained by an advisory group.

The contractor will be responsible for maintenance and distribution, for quality control of the cell lines, for monitoring and characterizations. A catalog of available lines with descriptive information on each, including clinical data, would be prepared and updated twice yearly.

An advisory mechanism will be instituted for the resource, to evaluate programmatic needs, rule on the criteria for the introduction of new cell lines, objectively evaluate the value of the characterizations, the need for additional studies, the breadth of its availability, and the scope of the service, i.e. the number and variety of tissue culture lines to be maintained. Requests for cell lines from the resource will be subject to prior approval by the project officer (or designee). Only written requests will be honored and these would include descriptions of the intended use and qualifications of the requestor. Standard forms included with each cell line will be modified, where appropriate, to emphasize safety aspects and proper handling of the cell lines, e.g., the Ter-1 and MCF-7 cell lines, which are reported to contain retrovirus-like particles need to be accompanied by precautionary information.

Consideration will also be given to the relationship between this resource and other similarly supported cell repositories such as those maintained at the Naval Biomedical Research Laboratory (Oakland, Calif.) and the Mason Research Institute (Worcester, Mass.). This is not to imply that duplication of holdings is necessarily undesirable. Indeed, duplication is an important safety factor. However, some effort needs to be made to determine the relationship between ostensibly identical cell lines held in several banks. Individual resources could then be encouraged to specialize, both in terms of the scope and depth of the collections, as well as in the types of detailed characterizations which should be undertaken by each.

The Board's comments:

"The Board approves both cell bank concepts that were presented to us, the one at the Salk Institute, the second at Sloan-Kettering. However, the Board feels very strongly that with the proliferation of cell bank resources supported by the various institutes of NIH it is imperative that a committee be charged promptly with an overview of all of these several resource programs to review their legitimacy, to determine whether undesirable overlaps exist, to examine questions relating to cost effectiveness, maximum scientific utility, etc. The Board is concerned that adequate coordination of these several programs has not occurred, nor are we convinced that clear and rational guidelines have been formulated with respect to such matters as accessioning, discontinuation of lines that prove not to be sufficiently useful, etc. This concern is particularly accentuated by our realization that with the explosive growth of hybridoma technology, the numbers of hybridoma lines that could become candidates for central banking might almost be limitless. Thus, we believe it is not only appropriate, but indeed urgent, that a committee be formed to review the several cell and tissue banking programs that are currently supported by NIH as well as other agencies (for example, ATCC)."

AGREEMENT SEEMS NEAR ON GUIDELINES FOR CANCER CENTER SUPPORT GRANTS

NCI staff, centers program advisors, and cancer center directors—after three years of wrangling—appear finally to be nearing agreement on new guidelines for center core grants which would establish some limits on the size of those grants without impinging on the flexibility of centers in using that support.

The Working Group on Guidelines of the Div. of Resources, Centers & Community Activities Board of Scientific Counselors reached tentative agreement last week with Cancer Centers Program staff and two representatives of the Assn. of American Cancer Institutes on the basic elements of a formula for limiting the size of core grants. Essentially, here is how that formula would work:

—Core grant renewal applications would be limited in total amount of funds requested to the current

budget plus a fixed percentage. DRCCA Acting Director William Terry used the figure of 10 percent, but that is subject to adjustment in further discussions and, if adopted, to the realities of available funds.

—Peer review, by the Cancer Center Support Grant Review Committee, would proceed as usual, with requested budgets subject to adjustment by reviewers, and priority scores assigned to each application.

—The applications would be ranked by priority score. Those with better scores would receive "bonuses" on a sliding scale, up to a predetermined percentage of their budgets. Those in the middle of the scale might receive only the amounts recommended by peer review. And those scoring in the lower spectrum would be penalized, receiving the recommended amounts less a certain percentage on a sliding scale, again down to a perdetermined percentage limit. Some with the worst scores might not be funded at all.

Under this plan, the maximum percentage increase which could be applied for would be determined by the amount of money available for cancer center support (core) grants.

This plan was developed as somewhat of a consensus after nearly a day of discussing deficiencies in both the present and proposed new guidelines. It grew out of Terry's comment that "I would be comfortable with some cap which would permit the greatest amount of flexibility." Working Group Chairman Charles Moertel and BSC Chairman Stephen Carter suggested that priority scores might be used to determine final amounts.

"This would use the present level of the core grant as a cap, modified by a prior benchmark, where you might get a little more or a little less," Terry said.

"I would like to give that one a try," commented Timothy Talbot, president of Fox Chase Cancer Center, one of the AACI representatives. Albert Owens, director of the Johns Hopkins Cancer Center and the other AACI representative, agreed.

The problem of mushrooming core grant budget requests and NCI's inability to do anything about them is due largely to provisions in the current guidelines which permit payment of center staff investigators' salaries, all or in part, out of core grants. The guidelines require only that such payments should reflect the amount of time those investigators devote to cancer related research. The review committee cannot reduce those requests, and funding them is automatic. The result has been that some centers have transferred an increasing amount of salary support from R01 and P01 grants and other mechanisms to core grants.

Raymond Morrison, program director in the Cancer Centers Branch, said that renewal applications have been showing substantial increases in requests for staff investigator salary support. "They are approved automatically if they conform to the guidelines."

With an estimated 1,500 principal investigators in the 61 centers with core grants eligible for salary support, and estimating they spend an average of 75 percent of their time on peer review funded grants and contracts, with an average salary of $40,000 a year, the potential cost is $66 million—almost the entire centers program budget.

The latest proposed revision of the guidelines calls for a limit of 35 percent on individual staff investigator salaries. The National Cancer Advisory Board Subcommittee on Centers went along with that, but reservations were raised when the subcommittee reported to the NCAB last month. The suggestion was made by NCAB member Janet Rowley that consideration be given to eliminating staff investigator salary support entirely from the core grant.

Talbot, Owens, and Working Group member Harry Eagle pointed out the diverse nature of centers, with varying requirements. Some centers rely heavily on use of core funds for salary support, others not at all.

Terry's proposal appealed to the Group because it would permit center directors to use their funds as they see fit, subject to peer review. If a center needed more of its grant for salaries, fine—it would not have as much, then, for resources.

Morrison pointed out one weakness in the plan. "To be devious, a center director could shift more of his budget request to salaries. Under existing guidelines, it would be automatically approved, putting his budget at a higher level (and thus eligible for a bigger bonus)."

The Working Group agreed to the principle of the plan as described above, leaving the problem of staff investigator salaries to be addressed by NCI staff for presentation at the group's next meeting. The BSC will meet Jan. 29-30, and the group will meet before then to complete its recommendations on the guidelines.

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. Some listings will show the phone number of the Contract Specialist who will respond to questions. Listings identify the respective sections of the Research Contracts Branch which are issuing the RFPs. Address requests to the Contracting Officer or Contract Specialist named, Research Contracts Branch, National Cancer Institute, Blair Building, 8300 Colesville Rd., Silver Spring, Md. 20910. Deadline date shown for each listing is the final day for receipt of the completed proposal unless otherwise indicated.

RFP NCI-CM-17373-14

Title: *Selective acquisition of chemicals and drugs for cancer chemotherapy*

Deadline: *Approximately Jan. 16*

The Drug Synthesis and Chemistry Branch, Developmental Therapeutics Program, Div. of Cancer Treatment, is seeking sources to provide support services related to the acquisition of selected novel synthetic compounds for evaluation as potential anticancer agents.

The DS&CB will be selecting from among potential compound acquisitions provided by the contractor. The number of potential acquisitions must, therefore, be in excess of the number required for registration. The larger the ratio of potential acquisitions to selected compounds the better, however. a minimum of 20,000 novel chemical structures per year shall be required of the contractor.

The contractor will be required to ensure that the total number of selected compounds registered by NCI is 13,500 per year. Approximately 11,000 of these will be provided through the contractor's liaison, collection, and direct mail acquisition activities.

The contractor shall perform the following tasks: (1) undertake liaison efforts to develop and maintain sources of compounds for selection and test in the primary screen; (2) present and explain NCI's commercial discreet agreement to prospective suppliers; (3) acquire lists of chemical structures, representing compounds which are available for testing, for the purposes of selection by DS&CB; (4) attempt direct mail acquisition of selected samples as directed by DS&CB; (5) acquire selected compounds from a wide variety of sources through field and liaison activities; (6) acquire compounds for tumor panel testings; (7) plan and coordinate compound collection trips and perform on site collection of samples; (8) prepare data records for all collected samples and for all samples received by NCI; (9) weigh all incoming samples for the primary screen; (10) provide for the temporary storage and control of all incoming samples; (11) coordinate the transfer of incoming samples with appropriate documents to the storage contractor for inventory control and for distribution to screeners; (12) prepare all compound-related documents required for the computer registration of samples; (13) perform searches from the computer terminal; (14) receive and monitor the distribution of all computer-generated outputs of the NCI-Chemical Information System to suppliers and NCI staff; (15) conduct routine correspondence between the government and compound suppliers; (16) organize and maintain files of correspondence and all other information pertaining to compound submissions and devise efficient records retrieval system; (17) conduct technical and data analysis in support of development and evaluation of selection criteria; (18) provide detailed reports for all compound acquisition activities, liaison efforts, refill requests, and declassification requests for discreet compounds.

Since the contractor will have access to proprietary information on samples acquired by NCI, the contractor must not have research or commercial interests in competition with the donors of these samples. Offerors shall be required to respond in their proposals to the question of conflict of interest.

The contractor shall be required to make daily trips to the DS&CB's offices at the Blair Building in Silver Spring, Md., to perform log-in, sample pickup, and certain clerical and computer terminal operations. It is required that the contractor maintain an office and staff for this project within a 50 mile radius of the Blair Building.

Contract Specialist: Susan Hoffman
Cancer Treatment
301-427-8737

RFP NCI-CB-14339-34

Title: *Biomedical computing software services in support of Breast Cancer Treatment Program*

Deadline: *Dec. 22*

NCI is seeking a contractor to provide computer related support services to the Breast Cancer Task Force program, Div. of Cancer Biology & Diagnosis. The major areas to be utilized are: (1) steroid receptor clinical correlation studies; (2) biological tumor marker studies, and (3) surgical adjuvant studies.

This support involves abstracting large sets of clinical and laboratory data, coordination of multi-institutional biomedical studies, and preparation and execution of computer programs for sophisticated statistical analyses. The contractor should have the capability to use the computer systems of the Div. of Computer Research Technology, NIH, but should have its own computer terminals.

The annual estimated required level of effort is four and one-half person years; one person year of project management, two and one-half years of programmers and biomedical analysts and one person year of general datatech services. It is desirable that the project manager and one other staff member have biomedical background. Organizations submitting proposals for this project must have (or be willing to establish prior to contract award) regular office facilities within a 35-mile radius of NIH, Bethesda, Md. A four year contract is anticipated.

Contract Specialist: Elizabeth Abbott
Biology & Diagnosis
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Published fifty times a year by The Cancer Letter, Inc., P.O. Box 2370, Reston, Virginia 22090. Also publisher of The Clinical Cancer Letter.