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ACS BOARD TO CONSIDER PROPOSAL FOR IMPLEMENTING CANCER RESPONSE SYSTEM NATIONWIDE; COULD END CIS

The American Cancer Society Board of Directors will consider a proposal from ACS staff to implement nationwide the Cancer Response System it has been developing since 1983. If ACS proceeds with full implementation of the system, that could lead to phasing out the national Cancer Information Service operated primarily by cancer centers under contract with NCI.

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In Brief

HAWAII CENTER SEARCHING FOR NEW DIRECTOR; ROSENBERG DENIES REPORT HE'S GOING TO TAMPA

CANCER RESEARCH Center of the Univ. of Hawaii is conducting a nationwide search for a new director. The announcement of the search said candidates should have an MD or PhD, record of demonstrated leadership and administrative ability, national and international recognition in cancer research, experience in working with external agencies that support cancer research, and a record of successful grant procurement and research achievement. The salary is negotiable. The directorship is nontenurable but the director will qualify for early tenure in a related academic department or research institute. Laurence Kolonel, who heads the center's Epidemiology Program and is acting director of the center, has said he is not a candidate for the permanent appointment. Applicants may send resumes and names, addresses and phone numbers of at least five references to Robert L. Pecsok, Dean of Natural Sciences, 235 Bilger Hall, 2545 The Mall, Univ. of Hawaii, Honolulu 96822, phone 808-948-6451. Closing date is Aug. 31.... **STEVEN ROSENBERG,** chief of the Surgical Oncology Branch in NCI's Div. of Cancer Treatment, denied reports he may leave that position to head the surgery department at the new Moffitt Cancer Hospital in Tampa. The report appeared in a newsletter published by the Florida Cancer Council. Rosenberg said he had never heard of Moffitt nor talked with anyone from Tampa about moving there.... **THOMAS WALDMANN,** chief of the Metabolism Branch in NCI's Div. of Cancer Biology & Diagnosis, has been named to the National Academy of Sciences.... **LANE ADAMS,** executive vice president of the American Cancer Society, received a special award from the American Health Foundation at the organization's annual awards luncheon recently. The award was presented by AHF President Ernst Wynder, who also presented the organization's lifetime award to HHS Secretary Margaret Heckler.... **CHARLES MCCALL,** who has the distinction of serving as dean of three American medical schools, presently the Univ. of Oklahoma College of Medicine, will become vice president for patient affairs at M.D. Anderson Hospital & Tumor Institute in July.

ACS BOARD TO CONSIDER IMPLEMENTING NATIONAL CANCER RESPONSE SYSTEM

(Continued from page 1)

The proposal will be submitted to the ACS Board at its meeting later this month.

Diane Fink, ACS vice president for professional education, described the Cancer Response System at a meeting of the National Cancer Advisory Board's Committee on Information. The system has been tested at eight ACS divisions in the Midwest. The tests have demonstrated to her satisfaction, Fink said, that the combination of ACS staff and volunteers, along with 800 phone technology and the ACS data base, can work effectively. Integrated into the Society's divisions around the country, it could be done at a fraction of the amount CIS is costing NCI, she said.

The current NCI contracts support CIS operations at 17 institutions at a cost of $3.7 million a year. Four other institutions are part of the system but are entirely self supporting except for publications and other backup material provided by NCI. Those contracts have recently been recompeted and are in the final stages of negotiation. NCI estimated the new level would be $4.7 million a year, for five years.

The new contracts probably will be carried out through the five years, even if ACS proceeds with full implementation of its system, as ACS phases it in. Paul Van Nevel, director of NCI's Office of Cancer Communications, told the committee that NCI and ACS have been meeting regularly to coordinate their efforts.

The ACS and NCI systems provide basically the same service: answering a wide range of questions about cancer from the public, including cancer patients, their family members, and others. The CIS phone number is 1-800-4-CANCER; the ACS number is 1-800-ACS-2345.

Fink said the data base used for the Cancer Response System, primarily from the Society's various publications, is computerized. Mechanisms for medical referral are developed by each division to reflect local customs and policy, and patients who need counseling are referred to nearby local ACS units.

"With training, the divisions can do a fine job," Fink said. ACS conducted a user survey in the areas where the system was tested and found that 90 per cent of the callers were satisfied that they had received the information they requested. Those who had some questions for the most part just wanted more information. "We can handle about 95 per cent of the calls with our data base," Fink said.

Richard Bloch, chairman of the NCAB committee, said, "This is a wonderful thing the American Cancer Society is doing. If they do go national with it, I hope NCI will get out of the consumer information service. ACS can do a better job and do it cheaper."

OCC would still have plenty to do under its mandate from Congress to provide the public with information on the prevention and detection of cancer, along with responding to the myriad of questions relating to treatment of cancer. NCI receives about 4,000 media inquiries a year, about 160,000 written requests for information and about 120,000 phone calls. The CIS contractors receive about 350,000 phone calls. NCI distributes 14 million copies of various publications a year.

Bloch's committee worked out a recommendation on how to handle a touchy issue involving a new PDQ vendor, which the full Board later approved.

Susan Hubbard, director of the International Cancer Information Center, described NCI's negotiations with Mead Data Central in which PDQ would become part of Mead's new Medis data base. Medis is promoted only to physicians and other health professionals, and includes the full text of several professional medical journals. Hubbard said that Mead plans to market PDQ extensively to community physicians, to make it available to physicians in hospital settings, and to provide training for physicians in using the system.

The problem is that Mead also has other data bases which it markets to corporations and attorneys, for the most part. It is Mead's policy to allow users of one of its data bases access to all of its others. That would be contrary to the NCAB recommendation, hammered out after lengthy and heated discussion, that PDQ should be available only to medical professionals.

Hubbard said that Mead did not intend to market PDQ to its corporate and attorney clients, and NCI staff felt use of PDQ by those clients would be minimal. However, Board members Victor Braren, Ed Calhoon, Robert Hickey and William Powers all expressed concern that access to PDQ protocols by non health professionals could jeopardize NCI's relationships with the professional organizations which have been cooperating with NCI in development of the system.

Board member Helene Brown suggested that the NCAB approve the license agreement on a limited basis so that evaluation can be made of the use by nonphysicians. She also suggested that NCI staff consult with the American Medical Assn., which has been concerned with inappropriate use of PDQ.

Brown's recommendation was approved by the full NCAB, with Powers casting the only vote against it. He said was concerned about the use by nonphysicians, and about what he said were "still significant inaccuracies" in the Michigan

professional listings in PDQ. NCI contends that most of the inaccuracies—mostly names of Michigan radiotherapists which had been omitted—have been corrected.

HAMMER, SCHMIDT, NEW YORK SCIENTISTS AGREE: BUDGET REDUCTIONS DISASTROUS

The present chairman of the President's Cancer Panel and the Panel's first chairman agreed Monday that NCI's budget should be dramatically increased and were not too far apart on what the amount should be, give or take a billion or two.

Armand Hammer, in opening the Panel's meeting at Memorial Sloan-Kettering Cancer Center, said, "In my opinion, NCI should have a budget double or triple its present size." That would be in the range of $2.5 to 3.5 billion.

Benno Schmidt, chairman from the Panel's inception in 1972 until 1979, said, "We need $5 billion a year over the next five years." Schmidt, an investment banker, is chairman of the Boards of Managers and Overseers of MSK.

Hammer has come to the aid of investigators who are developing promising new biological therapies for cancer; his visit to MSK cost him another $200,000. He announced Monday that he was giving $100,000 each to Lloyd Old and Roland Mertelsmann to help in development of their programs at the center.

Hammer said that in a discussion recently with George Keyworth, head of the White House Office of Science & Technology Policy, he had described the work of NCI's Steven Rosenberg, who has obtained promising results in treating patients with interleukin-2 and lymphokine activated killer cells. The fact that Rosenberg's protocol produced complete remissions in two patients with advanced solid tumors prompted Hammer to give him $100,000 to permit him to double the number of patients on those studies. Rosenberg soon also will have use of the clinical facilities at Frederick Cancer Research Facility.

Hammer said Keyworth told him, "Show me 20 patients with the same results as Dr. Rosenberg's first two, and I'll go to the President and ask for the money to expand those trials across the country."

A full scale clinical trial with 500 patients would cost about $15 million a year.

Schmidt said the National Cancer Act of 1971 was passed "thanks to a President devoted to the cause and a Congress equally committed." Initial budget increases from NCI's level then of about $170 million were put to good use, but, Schmidt said, the disappointments began about 1976 or 1977, "when our funding began to level off." Since then, the increases have only matched inflation, if that.

"We're spending $400 billion a year on health care, the bulk of that by the federal government, and the bulk on diseases that can only be diminished or eliminated through research. It is hopeless to try to put a lid on health care costs by lowering the price of surgery. Those costs can be held in check only through research."

Schmidt said Cancer Program advocates should "do a better job of making the fiscal point. If any business were spending $400 billion on expenses susceptible to elimination but management was spending only one per cent of that amount on research calculated to eliminate those expenses, that management would be replaced."

Schmidt said MSK loses about $20 million a year on patient care and research and meets that deficit from fund raising efforts and gifts. The institution raises another $10 million a year to fund chairs and for other activities, and currently is in the second year of a $175 million, five year effort to raise money for new buildings and facilities. "We're pretty well extended. We can't assume we can go out and raise another $10-15 million (if NCI funding is cut back). We're running about as fast as we can. Level funding would be a tragedy. Reduced funding would be a disaster."

Calling for renewal of the National Cancer Act, Schmidt said "the same conditions exist now that existed in 1971, making the special authorities for NCI as necessary as ever."

Paul Marks, MSK president and chief executive officer, said, "If federal support is held constant, the exciting progress we have seen will be slowed, new therapies and intervention strategies will be delayed, and we will see curtailment of our education and training programs." Cancer research is challenging and rewarding and is attracting the best minds, Marks continued. Federal support of research training programs is vital to the continued flow of young people into cancer research, "without which our efforts will fail."

Some of those research efforts were described by investigators from MSK and other New York City institutions, most of whom emphasized the value of basic research.

Old described developments in use of monoclonal antibodies and tumor necrosis factor. "Cancer centers are ideally suited for rapid transfer of research findings into clinical practice," he said. Clinical trials with TNF will start within a few months in the U.S. and abroad.

Mertelsmann reported on IL-2 phase 1 studies. Recombinant IL-2 is well tolerated up to a dose of 1 million units per meter squared; doses are related to biological effect; there are discrepancies between in vitro and in vivo toxicities; no significant antitumor effect was seen. However, methods are being developed to achieve higher local

levels of IL-2, including intracavitary, intralesional and subcutaneous injections; modulation of suppressor mechanisms by combining it with cytoxan; and continuous administration.

Bernard Weinstein, director of the Columbia Univ. Comprehensive Cancer Center, said that when the history of cancer research is written, "the National Cancer Act will be singled out as the major impetus to biomedical research in general, as well as to cancer research." He said "exciting opportunities" exist for epidemiologists to work with laboratory scientists to identify populations exposed to carcinogens and then to develop interventions to prevent progression to cancer. He called the effort, "molecular epidemiology."

Matthew Scharff, professor of cancer research at Albert Einstein College of Medicine Cancer Research Center, said that shared services at the center "are uniquely available through our core grant. They play a powerful role in facilitating the research of each investigator in the institution. It promotes rapid communication and saves an enormous amount of time and effort. Any reduction of funding would have an enormous impact on the work of each investigator and greatly harm our work."

Richard Rifkind, chairman of Sloan-Kettering Institute, said "It would be a national shame to fail to provide support" for continued progress in cancer research.

James Holland, chairman of the Dept. of Neoplastic Diseases at Mount Sinai Medical Center, cited recent retrospective studies in which it was found that cancer patients who had had blood transfusions had about 10 per cent lower survival rate than those who had not. "We are in a trial now using blood (for transfusions) that is treated to remove the lymphocytes which might be interfering with the host immune competence," Holland said.

Holland reviewed progress in treating pediatric cancer; said the "brilliant leadership" of the National Surgical Adjuvant Breast & Bowel Project and that group's chairman, Bernard Fisher, in demonstrating that lumpectomy and radiation is equal in survival to mastectomy "is a major, major accomplishment for NCI and cooperative groups—it will lead to less reluctance by women to subject themselves to examination;" and described a Cancer & Leukemia Group B study comparing CMFVP with CMFVP plus the combination of vinblastine, adriamycin, thiotepa and halotestin for treatment of breast cancer patients with 10 or more positive nodes. The difference in favor of the two combinations is significant at 48 months, Holland said.

Samuel Hellman, physician in chief at MSK, described successes in use of combined modalities and said, "We've learned a very important lesson, to avoid the trade union mentality of using only one modality. We're at the beginning of a golden age in biology, and it is difficult to believe that it won't pay off."

DCBD BOARD APPROVES CONCEPT FOR NEW DIAGNOSIS RESEARCH PROGRAM PROJECTS

An initiative to stimulate cancer diagnosis research through program project grants was approved by the Board of Scientific Counselors of NCI's Div. of Cancer Biology & Diagnosis last week.

The Board gave concept approval to the program which will support up to four three year PO1 awards over a five year period. Brian Kimes, associate director and head of the Extramural Research Program, had estimated each award would amount to $500,000 a year with direct and indirect costs, but the Board voted to limit that to $300,000 each.

The Board also gave concept approval for up to three cooperative agreements to establish a tissue procurement network, at a total cost of almost $2 million for three years; and for recompetition of the contract which supports a human tumor cell bank.

DCBD's Cancer Immunotherapy Branch had planned to ask for concept approval for the recompetition of its contract with American Type Culture Collection for operation of a distribution center for cell lines useful in tumor immunology research. The new contract would have been for five years at a total estimated cost of $1.5 million. The Branch determined, however, that it would not recompete the contract.

"Because of increasing utilization of the cell line bank in each successive year of the current contract," Project Officer Judith Whalen said, "the tumor immunology bank is rapidly approaching a breakeven point between revenues and operating expenses. It is anticipated that NCI will not need to support this resource beyond September, 1986, when the contract ends. With permission of the cell line originators, lines will be donated to ATCC permanently and provided to the scientific community through ATCC's regular catalog. Accessioning can continue by utilizing revenues accrued after the breakeven point is reached."

Whalen said that conclusion was based on the following assumptions:

1. Cell line shipments in 1987 will be 15 per cent higher than in 1985, i.e., 3,795 per year. In 1983, 1,764 cell lines were shipped; in 1984, 2,649 lines were shipped; and in the first four months of 1985, 1,094 lines have been shipped for a projection of 3,282 shipments for 1985. With the continued increase in quantity demanded, a 15 per cent increase by 1987 is conservative, Whalen said.

2. ATCC will escalate the price of cell lines with inflation.

"More realistic estimates of tumor immunology bank utilization allow us to anticipate that not only will the bank be self supporting in 1987, but also that five to 10 new lines can be accrued per year," Whalen said.

Descriptions of the concepts and Board discussion follows:

Cancer diagnosis research program projects. Four three year awards, total estimated cost $3.6 million over five years.

In the last five years, the Cancer Diagnosis Branch has substantially changed its orientation from the use of contracts to investigator initiated grants as its primary mechanism. During this transition in the use of funding mechanisms, there has also been a major change in program objectives. The primary objective of the Branch is currently to stimulate the translation of basic research information into preliminary clinical feasibility studies. This approach is expected to provide new, innovative approaches for improving cancer detection and diagnosis as well as to develop better methods for monitoring cancer therapy. Rapid advances in technologies associated with molecular biology, immunology and instrumentation offer new opportunities for basic research scientists and clinicians to design collaborative studies to more effectively achieve these program objectives.

The program project grant mechanism (PO1) is ideally suited for stimulating multidisciplinary collaborations. A study of all active program project grants supported by NCI has demonstrated clearly that NCI is funding very little collaborative research that emphasizes improved cancer detection and diagnosis. In fact, most diagnostic studies being supported within PO1s are only a small part of very large, complicated programs in the Div. of Cancer Treatment. There is very little if any diagnosis related collaboration between basic research scientists and clinical scientists in these programs.

Basic research and clinical investigators should be encouraged to design collaborative studies that

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CONCEPT REVIEW FIGURES ARE ESTIMATES ONLY: RFPs, RFAs NOT YET AVAILABLE

The dollar estimates with each concept review brought before the various boards of scientific counselors are not intended to represent maximum or exact amounts which will be spent on those projects. They are intended only as guides for board members to help in determining the value of the projects in relation to resources available to the entire program or division. Responses should be based on the workscope and description of goals and methods included in the RFPs (contracts) and RFAs (grants and cooperative agreements). Availability of RFPs and RFAs will be announced when the Institute is ready to release them.

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are clearly directed toward developing new, innovative approaches for improving cancer detection and diagnosis. These collaborative studies would be expected to take advantage of the newest biological concepts and technologies in cancer biology research. Studies, in the form of program projects, containing fewer than four projects (including the core component) would be encouraged.

The rationale for supporting the concept of program project grants containing collaborative interactions between basic research scientists and clinical investigators is three fold: (1) the program project grant is the ideal support mechanism for fostering scientific collaboration and interaction; (2) the program project grant is likely to be extremely effective in promoting the practical application of basic research discoveries into clinical diagnosis; (3) the RO1 review process does not encourage multidisciplinary studies with budgets much in excess of $100,000.

The focused program project format is ideally suited to accomplish the kind of developmental feasibility research that the Branch emphasizes. Very few program project grants currently supported by NCI really accomplish these objectives, because diagnostic research is often directed toward monitoring therapy or is lost within other, more diffuse, programmatic objectives. This use of the PO1 RFA program initiative would effectively stimulate novel approaches to diagnostic research, encourage collaborations between basic and clinical investigators and still retain the advantage of investigator initiated ideas.

Kimes proposed that two grants be funded in the first year for three years, another added in the second year and one more in the third year. The program would phase down to two grants in the fourth year and one in the final year. Review would be by a special review committee in NCI's Div. of Extramural Activities, with no site visits. "The size of these PO1 applications should allow the science, the nature of the interactions and the collaborations to be fully described in writing without the necessity of on site elaboration," Kimes said.

Sheila Taube and Roger Aamodt will be the program directors.

"One million dollars for two grants (as Kimes had proposed) is too much," Board member John Stobo said.

Kimes said the estimate was based on four projects within each grant, at $125,000 per project. "That could be high," he admitted.

"Anytime you have clinical studies, the cost is higher," Ihor Masnyk, DCBD deputy director, said.

Dennis Cain, chief of the Grants Review Branch in DEA, said that most applications responding to RFAs have been reviewed with special study sections, depending on the number of applications, and that probably would be the case with the diagnosis PO1 RFA. "The problem is that this doesn't fit precisely into one of three existing program project review committees."

"I envision this will be add ons to existing projects with other support," Board Chairman Matthew Scharff said. "So this is too much money. Let's get a consensus on the upper limit."

"Three hundred thousand each for direct and

indirect costs should be enough," Stobo said.

"We had in mind this would encourage collaboration of clinical and basic scientists," Taube said, "not just adding on to existing grants, but to formulate a program together that feeds on both aspects, clinical and basic. It becomes too expensive for an RO1."

"Either there are people out there who will see this and say, 'Ah, just what we need,' or there aren't," commented Board member Nancy Kleckner.

"We've already agreed that people are there. It's just that they do not need that much money," Stobo said.

"We see the lack of collaboration in diagnosis research between clinicians and basic scientists as an impediment to progress," Kimes said. "Diagnosis is an area that can benefit from collaboration of independent basic scientists and independent clinical scientists."

Referring to the proposed reduction from staff estimate of the cost, Board member Bernard Amos said, "One of the first things you would do would be to set up a core laboratory. You would need a couple of technicians. It will cost more than you think."

"Some programs will need more than others," Board member Stewart Sell said. "Brian needs some flexibility."

When Scharff asked if anyone was "uncomfortable" with the $300,000 limit per grant, no one responded, and the motion to approve the concept with that limit was approved unanimously.

Tissue procurement network. Three three year cooperative agreement awards initially, estimated cost $750,000 total the first year, $600,000 for each of the second and third years.

The aim of this potential program initiative would be to create a cooperative network of tissue procurement laboratories located in or near major centers of biomedical research in the U.S. Many researchers have indicated the need for improved access to both cancer and normal tissues, the lack of which is viewed as a major obstacle to cancer related research. The purpose of this network is to encourage efforts to collect and distribute human tissues and to facilitate research utilizing those tissues. These activities are expected to stimulate basic and developmental research in many areas including molecular biology, immunology and genetics.

Advances in molecular biology, immunology and genetics have, for the first time, opened the possibility of understanding basic mechanisms in cancer development, invasion and metastasis and of utilizing this understanding to develop new and more effective approaches to detection, diagnosis and monitoring of therapy. These advances have resulted in a shift of emphasis of these studies toward human systems, and thereby in an increased demand for human tissue. The Diagnosis Program of NCI was made aware of this need by the scientific community through comments from study section members, through reviews which criticized research proposals for not showing satisfactory arrangements for obtaining human tissue and through direct contacts initiated by clinical and basic research scientists throughout the biomedical community. Moreover, the issue of the lack of human tissue for research has been raised in letters and inquiries to NCI, as well as in national forums such as the meetings of the President's Cancer Panel and the National Cancer Advisory Board.

Since May, 1984, the Diagnosis Program has actively sought information concerning the magnitude of the need for tissue procurement research and services and the necessity for NCI support in this area. The conclusion, resulting both from discussions with individual researchers and from a meeting of an ad hoc Tissue Procurement Working Group, was that there is a great need for additional sources of tissue. The working group concluded that the few existing services, many of which operate with NCI grant support, are heavily burdened and thus unable to fully meet current needs, while at the same time tissues sufficient to meet these needs are being routinely formalin treated or discarded. They concluded further that potential research progress is being inhibited because many individuals, especially new investigators, investigators who do not work in major medical centers and molecular biologists who do not work in clinical settings, find it difficult to establish collaborations that provide sufficient access to tissues. The working group also agreed that the need for additional tissues is not likely to be met either from existing sources or from the scientific community without NCI stimulation. They recommended the creation of a model tissue procurement network which would function cooperatively to serve the need of the scientific community.

The proposed network is intended to support the cancer biology and diagnosis research communities and stimulate cancer research in areas such as molecular biology, immunology and genetics, areas which are primarily supported by DCBD. It is anticipated that this concept will advance research by making tissues available to basic scientists who might otherwise not be able to establish the clinical collaborations required to obtain tissue.

Aamodt is the program director.

Ansering the question whether supplying human tissue could also be self supporting, as it appears the distribution of cell lines will be, Aamodt said it could be only if the current average fee of $43 were doubled or if the sales were doubled. "The two are very different," Aamodt said. "With the cooperative agreements, we would hope to serve the entire country with a full range of tumors."

"It is a very difficult type of operation to establish," Kimes said. "Many of the banking efforts in the past have failed. We won't fund any unless we get some very good, strong applications." Asked by Scharff to define the failures, Kimes said they had problems getting tissues and organizing their distribution. "What has never been done successfully is tapping into hospitals and getting tumors before they are discarded."

"With cryopreserved tumors, when you reach into a freezer, you do not always know what you're getting," DCBD Director Alan Rabson said. "This (proposed concept) will not really be a tumor bank."

"It will be an on demand service, then," Board member Joseph McGuire commented, and Rabson said it would.

"There will be some short term banking of rare tumors, kept for one year at the most," Aamodt said. "One of the big problems in the past has been quality control and the length of time tumors are stocked."

"A key point is the quality of the diagnostic service available," Board member Nelson Fausto said.

"Quality control will be very important," Kimes agreed. "This is a pilot run, to see if it works. If we're convinced it is effective, we will bring it back to you (for consideration of expanding the network)."

Aamodt noted that the Univ. of Alabama (Birmingham) operates a tissue service and sends shipments as far away as Washington state "with very good results."

Human tumor cell bank. Recompetition of an existing contract with American Type Collection. Five years, estimated total cost $1 million.

The aim of this program activity is to provide the scientific community with a source of high quality human tumor cell lines which are of known origin, well characterized, and free of contamination. These cell lines are an important resource to the cancer research community and are currently in great demand. Well characterized human tumor cells have proven useful in many diverse areas of research in tumor diagnosis and immunology. Current advances in molecular genetics and immunology have relied heavily on the availability of well characterized human tumor cells as has immunodiagnosis.

The Diagnosis Program has supported the human tumor cell bank since 1973. The original awardee was Sloan-Kettering Institute, with the late Jorgen Fogh as the principal investigator. Fogh and his colleagues developed or otherwise obtained an impressive series of human tumor cell lines from many of the major cancer sites, primarily under support of the NCI contract.

In 1981 this program was recompeted and the collection subsequently transferred to American Type Culture Collection with Robert Hay as the PI. An NCI advisory committee selected a group of cell lines for transfer from Sloan-Kettering to ATCC and the transfer of selected cell lines was accomplished in 1982.

The cell bank at the Naval Biosciences Laboratory which had been supported by the Div. of Cancer Etiology was terminated and 1,552 cell lines were transferred to ATCC in October, 1982. Of these, 124 were selected for inclusion in the human tumor cell bank and the remainder donated to ATCC. These lines were characterized and 21 judged suitable for inclusion in the bank. Additional new cell lines were obtained in 1983 from EG&G Mason and from Relda Caileau of M.D. Anderson Hospital. As new potentially important lines are identified they will be considered for inclusion, consistent with the policy of maintaining a small collection of cell lines with high utility for research in tumor diagnosis.

There are currently 126 cell lines available from the collection, all of which are of high quality. The ATCC has expanded, partially recharacterized and cataloged the collection and made it available to qualified investigators for use in their own research. Access to the bank is subject to the following restrictions:

1. Cells will be used for research purposes only.
2. Cell lines will not be sold or used for commercial purposes.
3. Cells will not be further distributed to third parties for purposes of sale, or producing for sale, cells or their products.

Demand for the cell lines has been much greater than anticipated. The original ATCC contract was written in anticipation of fewer than 400 cell lines shipped per year. Distribution in the first active period of operation following transfer of the bank from Sloan-Kettering was 133 ampules. This has increased with each six month reporting period to 336, 705, 667, 937 and 1,063 in the latest reporting period (Oct. 1984-March 1985). It is anticipated that demand may increase still further with publication of a new ATCC catalog in July, 1985. While requests were primarily within the U.S. and Canada, 248 requests from foreign countries were included in the 1,995 cell lines delivered in the period from April, 1984, through March, 1985. The current contract expires on Sept. 28, 1986.

The objectives of this program are to acquire, characterize, catalog, store and distribute a variety of cell lines having specific utility for research in tumor diagnosis. Well characterized cell lines from solid tumors as well as cells from related normal tissues will be included. Information concerning the properties and utility of these lines will be provided to all interested investigators.

Aamodt is the project officer.

CONCEPT CLARIFICATION

The Cancer Letter reported (May 24, page 4) that the Div. of Cancer Etiology Board of Scientific Counselors had given concept approval to the recompetition of the contract for support of AIDS, HTLV-3 and related virus studies provided that the estimated cost of $1.15 million a year be obtained from other agencies.

In fact, the Board did recommend that DCE Director Richard Adamson "aggressively" seek funds from other agencies for the contract but did not condition approval of the recompetition on obtaining those funds.

The Board did place such a restriction on its concept approval of a one year renewal of the interagency agreement with the Dept. of Energy for studies of radiation doses to which military personnel may have been exposed in Japan and from nuclear weapons testing (PL 98-542). Board members agreed that NCI should not bear the cost ($200,000) of that effort.

RFA AVAILABLE

RFA 85-CA-13
Title: Clinical evaluations of models of biochemical modulation
Application receipt date: Sept. 15

NCI's Div. of Cancer Treatment invites applications for cooperative agreements to support a program of laboratory and clinical investigations directed toward the development and optimal clinical use of a combination of drugs which is synergistic in vitro.

The synergistic interaction of drugs at a biochemical level has been demonstrated in both in vitro and in vivo systems. These leads have not been successfully applied to clinical trials in a rational and systematic manner. Studies which reproduce in the clinical setting the preclinical conditions necessary for optimal synergy have not been performed. Synergy of two agents in murine tumors has previously been the justification for combining such agents in clinical trials. However, the design of these trials has failed to translate accurately dosage and scheduling considerations from the in vitro and preclinical in vivo models to the clinic. The potential for defining and maximizing the synergistic interaction of antitumor agents can only be realized by careful study in the preclinical setting, and by confirming and refining this interaction through detailed biochemical studies in the initial clinical trials. Having established in phase 1 trials the optimal doses and schedules to maximize both synergy and selectivity in this manner, the regimen should then be carried forward in appropriate comparative trials. The execution of such trials requires a major commitment of resources by both clinician and laboratory scientist. The experimental findings of each will modify the design and conduct of the other's study. Strong program planning under a single funding instrument is required to effect the integration of laboratory and clinic.

The proposed studies should emphasize:

A. Delineation of the mechanism of modulation at a molecular level in an in vitro setting.

B. Measurement of the antitumor efficacy of such combinations in in vitro systems.

C. Confirmation and validation of this enhanced efficacy and where feasible the mechanism of modulation at an in vivo preclinical level, and refinement of the therapeutic index based on any new in vivo findings.

D. Advancement of the combination into clinical testing, and in such trials to establish that the projected modulation is indeed occurring in the target tissue; examine the pharmacokinetics and pharmacodynamics of such schedules for later activity trials, and describe the alteration in selectivity by the modulation at a biochemical and clinical level.

Awardees will participate in the NCI sponsored drug development meetings three times a year in order to review progress, to plan and design research objectives, to establish priorities and to promote the development of collaborative arrangements between investigators. This will facilitate the stepwise progression of the awardee's proposed plans for biochemical modulatory development. NCI staff will serve as a resource of information and will work to facilitate exchange of information and material and collaboration between involved investigators.

Many of the NCI sponsored IND drugs are leading candidates with biochemical modulatory properties. Applications are encouraged which focus on these NCI sponsored IND drugs in order to provide leads to the most rational use of these chemotherapeutic agents in the treatment of cancer patients.

NCI anticipates making multiple awards as a result of this request. It is anticipated that $750,000 will be set aside to fund the initial year's awards. Awards will be made for a period of up to five years. It is anticipated that the starting date for the initial annual period will be between April 1, 1986, and July 1, 1986. No set aside funds have been provided for renewals.

The concept from which this RFA was derived was approved by the DCT Board of Scientific Counselors in June, 1984, and reported in The Cancer Letter June 15, page 3.

A copy of the complete RFA may be obtained by contacting Ann Carpenter, Program Administrator, Cancer Therapy Evaluation Program, NCI, Landow Bldg Rm 4C33, Bethesda, Md. 20205, phone 301-496-8866.

ANNOUNCEMENT

Preventive Oncology Academic Award

Competition for the Preventive Oncology Academic Award (KO7) is being resumed. There will be one receipt date annually, Oct. 1. Address inquiries to Program Director KO7, Cancer Training Branch, CCSP, DCPC, NCI, Blair Bldg Rm 424, Bethesda, Md. 20205, phone 301-427-8898.

NCI CONTRACT AWARDS

TITLE: Communications program evaluation
CONTRACTOR: D.K. Shifflet & Associates, McLean, Va., $844,210, three years.

TITLE: Characteristics of tumor boards
CONTRACTOR: Roswell Park Memorial Institute, $155,561.

TITLE: Immunologic survey of Oriental homosexuals in Hawaii
CONTRACTOR: Univ. of Hawaii, $293,236.

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