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NCI TO SLOW NEW CENTER DEVELOPMENT TO ASSURE FUNDING FOR EXISTING COMMITMENTS, KING SAYS

Existing cancer centers will have priority over the funding of new centers in competition for NCI dollars for "the next few years," Thomas King, director of NCI's Div. of Research Resources & Centers told members of the Cancer Centers Review Committee last week.

"We do have a commitment to previously designated centers," King said. "The number of new centers will be few indeed. The centers program won't be escalated at the same rate of the past."

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In Brief

NEW BIOMEDICAL RESEARCH PANEL TO ORGANIZE FEB. 24-25, DISCUSS MANDATE, PRIORITIES

PRESIDENT'S BIOMEDICAL Research Panel, pushed through Congress by Sen. Kennedy to do for NIH what the President's Cancer Panel is doing for NCI, will hold its first meeting Feb. 24 and 25. Franklin Murphy, chairman of the Times-Mirror Co. and former chancellor of UCLA, heads the Panel. Other members are Ewald Busse, Duke; Robert Ebert, Harvard; Albert Lehninger, Johns Hopkins; Paul Marks, Columbia; David Skinner, Univ. of Chicago; and Benno Schmidt, who as chairman of the Cancer Panel was designated by legislation as a member of the new Panel. The meeting, in Room 2010 of the New Executive Office Building in Washington, is open to the public both days, 9:30-5 on the 24th, 9-5 on the 25th. Agenda includes interpretation of the legislative mandate, definition of taks, assignment of priorities. . . . **NATIONAL MALPRACTICE** conference, sponsored by the American Group Practice Assn., is planned for March 20-21 in Arlington, Va. John Sauer, administrator of the California Hospital Medical Center in Los Angeles, told community cancer professional that in 92% of malpractice cases in California hospitals are named codefendants, and that 70% of the money awarded plaintiffs goes to attorneys . . . . **SENATE APPROPRIATIONS** Subcommittee for HEW, which has been among the more liberal forces in Congress working on money bills, has an even more liberal look now. Two conservatives who did not run for reelection, Democrat Alan Bible of Nevada and Republican Norris Cotton of New Hampshire, were replaced by Democrats Birch Bayh of Indiana and Lawton Chiles of Florida, with the Democrats taking over the vacated Republican seat. What's more, liberal GOP Sen. Edward Brooke of Massachusetts was designated ranking minority member, moving ahead of Clifford Case (N.J.) and the conservative Hiram Fong (Hawaii), with Case' consent. Other subcommittee members are Democrats John Stennis (Miss.), Robert Byrd (W.Va.), William Proxmire (Wisc.), Joseph Montoya (N.M.), Ernest Hollings (S.C.), and Thomas Eagleton (Mo.); and Republicans Ted Stevens (Alaska), and Richard Schweiker (Pa.)

NCI "STILL GROPING FOR POLICY" ON NEW CENTERS VS. FUNDING OF EXISTING ONES

(Continued from page 1)

Some members of the committee were startled. Jesse Steinfeld, former Surgeon General and now with the Univ. of California (Irvine), asked King if that was an NCI administrative decision.

"We're groping for a policy," King said. "With the existing centers we have ongoing commitments that have to be honored. We don't want to spread the money so thin that nothing gets done."

"But it's conceivable that a group with no center now may have a better program than an existing center. They will be penalized because they are younger or for some reason had not previously submitted an application."

King agreed that existing centers would have to compete against new applicants when their grants are up for renewal. "They will stand or fall on their merit . . . It is a delicate situation, however. I wouldn't like to recommend rigid criteria that would not allow flexibility."

The White House, through the Office of Management & Budget, is exerting pressures that are closing in on the centers program. The President's request to Congress that it rescind $123 million from 1975 appropriations includes $23 million earmarked for centers, half the amount voted by Congress. The President's budget requested only $22.6 million for 1976, again only half approved by Congress for the current fiscal year. And construction funds for the current year and for 1976 would be held to $22.6 million, down from $38.6 million in 1974.

OMB is remaining adamant about holding the eventual number of comprehensive centers to 20 or 21 instead of the 30 NCI wants to establish. And finally, OMB apparently will not approve NCI funds for new construction at centers unless either Congress or the courts explicitly order it to release the money.

RABSON TO HEAD BIOLOGY & DIAGNOSIS; MERCADO NAMED CO-OP GROUP CHIEF

Alan Rabson, deputy chief of NCI's laboratory of pathology, has been named to replace Nathaniel Berlin as director of the Div. of Cancer Biology & Diagnosis. Berlin will leave April 1 to head the Northwestern cancer center. Rabson, an MD (SUNY Downstate), has been at NCI since 1955. Raul Mercado, who has headed the Cancer Control treatment branch, is the new chief of the clinical investigations branch and will head the cooperative clinical group program.

FLOOD TELLS ACCC NOT TO FLOP IN SECOND ACT, ASKS GREATER COMMUNITY EFFORT

"If you don't kill them in the second act, you might lose their audience to the late show," Chairman Daniel Flood of the House HEW Appropriations Subcommittee—from whence all federal cancer program dollars flow—said at the recent meeting of the Assn. of Community Cancer Centers.

The first act, Flood said, consisted of the old Chronic Disease Control program which never really got off the ground, and the Regional Medical Programs, which did but still were legislated out of existence.

"What these two past efforts mean politically is this: There are hundreds of medical care personnel out there who have now been through the mill twice. They have in many cases re-directed their careers when new legislation beckoned toward expanding opportunities. Some moved their families to new cities.

"You'd better not disappoint these community-wise people again. They've chosen to devote their lives to something other than lucrative office practices. They've enlisted in the early battles of the War Against Cancer. But they've seen two programs go down the drain. Don't disappoint them again or you won't have the troops to make the Conquest of Cancer," Flood said.

"In politics it is always opening night. Every critic is there. Rarely is a comeback possible after an initial flop."

Flood pointed out that RMP was so successful in cancer work that it raised $4.51 from the communities in which it operated for every dollar of federal money it received. "That's real community acceptance. Though the money was raised on a voluntary basis it went far beyond any ordinary federal matching requirement. I wish you well in gaining similar community acceptance."

The veteran Pennsylvania Democrat cited the breast cancer detection and cervical screening programs as examples of deficiencies the community MDs could tackle.

"You and I know that breast cancer detection centers in this country are booked up through July in most cases," he said. "Broad-scale cervical screening is years and years behind its potential. First you tell the patient to get a check up fast. Early detection is the by-word. Then you set up a system where the woman is forced to wait six to eight months. That's not early detection.

"I am not a medical administrator. I don't know how you are going to make a breakthrough on that service demand. But I do know that your political life-blood is running down the gutter, to the river to be lost at sea if you don't solve that one.

"I want to give you more money. But you'll never get it unless you stir yourselves to the present opportunities and rearrange resources, do whatever is necessary to serve those patients you have motivated. Open up at night, weekends. Go to on-going programs and offer your help. . . I'm not suggesting. I'm warning you.

"Each of you who works in a cancer institution

had better get moving with whatever resources are at hand so you don't waste the talent that's already out there and so that you don't disappoint the public that has been activated to think about cancer, to hope about, and to take part in screening and other community programs.

"You cannot allow the Conquest of Cancer program to lead to a third disappointment. You'll set cancer therapy back 50 years if you don't maximize community cooperation in this second act."

NCI CONVINCED IT HAS ISOLATED HUMAN CANCER VIRUS; PROGRAM GETS NEW LIFT

George Todaro, chief of NCI's Viral Leukemia & Lymphoma Branch, fascinated members of the National Cancer Advisory Board with a presentation at the Board's meeting last November on various developments in the virus program. Much of the presentation dealt with conclusions Todaro and his associates had reached regarding evolutionary aspects of viruses.

"That's one of the most interesting discussions I have ever heard," commented Benno Schmidt, chairman of the President's Cancer Panel, when Todaro had finished. "But I can't help think what Paul Rogers' (Congressman, chairman of the House Health Subcommittee) reaction would be next time he asks me what we've got from the millions we've spent on the virus program, and I tell him we've found out that monkeys picked up a virus from cats 30 million years ago."

As it turned out, Todaro and Robert Gallo, who helped with the presentation, were holding back on some of their work, results of which would have provided Schmidt with a little better ammunition. Gallo and Robert Gallagher, who both work in the Laboratory of Tumor Cell Biology in NCI's Div. of Cancer Treatment, less than a month later reported to the American Society of Hematology that they had isolated a virus from the lab-grown leukemic cells of a 61-year-old woman with acute myelogenous leukemia.

There have been other claims in the past by investigators who thought they were the first to isolate a human cancer virus. NCI is convinced that the Gallo-Gallagher findings will hold up. If so, the pair could wind up sharing a Nobel prize. The Virus Cancer Program, under attack from all sides in recent years, would get a big boost. More importantly, new approaches could be opened to the detection, treatment and prevention of human leukemias.

The scientific paper describing isolation of the virus appeared in the Jan. 31 issue of *Science*. S. Zaki Salahuddin, of Litton Bionetics, assisted in the study. The team is supported by the Virus Cancer Program in collaboration with the Div. of Cancer Treatment.

The NCI team isolated the human virus three times from different test-tube cultures of the patient's cells. A blood sample drawn from the patient at M.D. Anderson by Ken McCredie was sent to NCI where Gallo and his co-workers divided the leukemic cells into seven test tubes for frozen storage and attempts to grow the cells in laboratory cultures.

Using various cell culture methods, the scientists mixed the patient's cells in the test tube with growth fluid supplemented with fluid from laboratory-grown human embryonic cells. They found that the fluid from the embryonic cells contained a "factor," believed to be a protein, that was essential for growth of the leukemic cells.

After a minimum of five weeks in culture, the leukemic began to produce a virus with a core of RNA and the characteristic appearance of the type-C virus. Gallagher and Gallo then conducted extensive studies of the internal components of the human virus to rule out the possibility of contamination by animal cancer viruses.

They found that the biochemical and immunologic properties of the internal components of the human virus were distinct from those of known animal cancer viruses, although the human virus was remarkably similar to two type-C viruses that cause cancer in non-human primates. In addition, they found that fresh, uncultured leukemic cells from the same patient contained viral components with the same properties as the internal components of the virus in the patient's laboratory-grown cells.

As early as 1970, Gallo and other coworkers detected in human acute leukemic cells an enzyme resembling reverse transcriptase. Since that time, the scientists have purified the reverse transcriptase and the RNA in the cells. The scientists have extensively characterized these internal components and demonstrated their similarity to the RNA and reverse transcriptase of cancer viruses from the gibbon ape and woolly monkey.

The scientists indicated that they will concentrate next on determining whether occurrence of the human virus is limited to one patient or one type of leukemia, or whether the virus is found in a wider range of patients and leukemias. They also will study whether leukemic patients have antibody to the virus or its proteins in their blood and whether the antibodies are present at only one point or during the course of the disease.

At the same time, the NCI team will work to determine whether the virus produces a protein on the surface of leukemic cells. Such a protein, if isolated and injected into laboratory animals such as rabbits, might provide antibody preparations that could be examined for their ability to destroy leukemic cells growing in the test tube. If such a technique were successful, the antibody might be useful in destroying residual cancer in treated leukemic patients.

Antibodies to the virus or to leukemic cell components produced by the virus might have other uses in detection or diagnosis of acute myelogenous leukemia. A test for early detection might be developed if the virus or related components appear prior to present indicators of the disease. Similar tests might be

valuable during treatment and follow-up to monitor effectiveness of drugs in destroying leukemic cells.

By studying cell alterations caused by the virus, the scientists also may determine whether the human virus causes damage to white blood cells and whether these changes are permanent.

NCI has moved away from the "magic bullet" justification for virus research, if indeed it ever did embrace that concept. Virologists now say only that viruses are "associated" with the etiology of cancer.

Development of virus-based vaccines has not been ruled out, but their application probably will be limited to high risk groups for some cancers and may never be feasible for others.

The payoff is most likely to occur in developing means for earlier detection and diagnosis, and in new treatment methods.

Publications: *Recent Research on RNA Viruses—Viral Components in Primate Cells* and *NCI Studies of Viruses and Acute Myelogenous Leukemia.* Write to NCI, Cancer Communications, Bethesda, Md. 20014.

NCI, IARC SPONSOR WORKSHOP ON EBV FOR INTERNATIONAL GROUP OF SCIENTISTS

Todaro, his boss, John Moloney, director of the Virus Cancer Program, and other NCI scientists met this week with an international group of cancer virologists, immunologists and biochemists in a workshop on the Epstein-Barr virus (EBV) at Frederick Cancer Research Center. Fifty scientists from 13 countries participated.

After NCI took over the Army's biological warfare facilities at Ft. Detrick, Md., the National Cancer Advisory Board decided it should be made into "an international center of excellence" in cancer research, with scientists from around the world being invited to work there. The workshop was the first major event involving the international scientific community.

The workshop was sponsored by the NCI and the World Health Organization's International Agency for Research on Cancer. It focused on problems preventing the most efficient production, concentration and purification of EBV.

Among the demonstrations planned for the meeting was a comparison of EBV preparations produced in five different laboratories actively engaged in EBV production or research. Analysis of the procedures used to produce the preparations could help identify factors responsible for discrepancies in production and assays of infectious EBV.

Proceedings of the workshop will be published by IARC.

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. Some listings will show the phone number of the Contract Specialist, who will respond to questions about the RFP. Contract Sections for the Cause & Prevention and Biology & Diagnosis Divisions are located at: NCI, Landow Bldg. NIH, Bethesda, Md. 20014; for the Treatment and Control Divisions at NCI, Blair Bldg., 8300 Colesville Rd., Silver Spring, Md. 20910. All requests for copies of RFPs should cite the RFP number. The deadline date shown for each listing is the final day for receipt of the completed proposal unless otherwise indicated.

RFP NCI-CM-57001

Title: *Production and supply of hybrid mice (B6D2F1 and/or CD2F1)*

Deadline: *March 21*

Conventionally reared and genetically characterized female C57BL/6 and male DBA/2 breeding mice must be utilized for the B6D2F1 hybrid.

All breeding mice will be supplied by the government. Hybrid mice (B6D2F1 and CD2F1), both male and female, shall be shipped at a minimum weight of 18 grams. Hybrid mice must be free of p. aeruginosa, salmonella Spp, chronic respiratory disease, and internal and external parasites.

The scope of activity for awards made under this project will be used for production and delivery of quantities of hybrid mice (B6D2F1 and/or CD2F1) ranging from a minimum of 4,000 per week to a maximum of 8,000 per week for a period not to exceed eight months with option to renew for additional one-year period.

The RFP will include the following minimum qualifications:

(1) Experience: (a) a minimum of two continuous years of experience in the production of laboratory mice for the commercial market immediately preceding publication of this synopsis; (b) NCI, DR&D, DCT, accredited status or capability to achieve this status.

(2) Personnel: (a) be able to demonstrate professional capability of key personnel to fulfill scope of work; (b) staff capabilities to maintain continuity of genetic characteristics of animals and level of microbiological monitoring as required for phases of activities noted above.

(3) Facilities: (a) those proposed at site, with equipment and methods employed capble of complying with specific DR&D, DCT, NCI, accreditation standards based upon laboratory animal resources standards for breeding, care and maintenance of laboratory mice and protocol devised for this project; (b) evidence that organization's facility is currently engaged in production and sale of laboratory mice.

Contract Specialist: D.M. Abbott
Cancer Treatment
301-427-7470

RFP NO1-CP-55667-02

Title: *Preparation of carcinogens*
Deadline: *March 31*

(A brief summary of this RFP appeared previously)

The Carcinogenesis Program has assumed the responsibility of providing well characterized reference compounds to carcinogenesis researchers. This project is designed to serve a dual purpose. One is to provide compounds that are unavailable from other sources, and the other is to provide analyzed chemicals to researchers in order to eliminate variability in experimental results due to the use of unanalyzed chemicals from a variety of sources.

All facilities devoted to this project must comply with the OSHA regulations for handling carcinogenic materials.

It is estimated that approximately 30-50 chemicals will be prepared per year and that the procedures will vary in complexicity. Some of the compounds may be commercially available and therefore would only need purification and analysis. Most of the compounds will be representatives of the various classes of carcinogens such as N-nitroso compounds, polynuclear hydrocarbons, amino azo dyes, aromatic amines, alkylating agents and miscellaneous compounds. The quantities will depend on difficulty of preparation and will probably range from 5g to 500g. Analytical support facilities are required for performing complete chemical characterization studies on each compound. The compounds, along with the analytical data, will be safely shipped to the carcinogenesis chemical repository for storage and distribution.

The compounds listed below are examples of the types of chemicals that might be prepared in the first contract year: N-nitrosomethylurea, 200g; bis-(chromomethyl) ether, 500g; 4-acetylaminofluorene, 10g; vinyl chloride, 1 lecture bottle containing 350g; 7-bromomethyl-12methylbenzanthracene, 5g.

For the purposes of evaluation responders must describe their plans to meet the basic objectives of the project in the production of analytically characterized samples of the above compounds. The description must include (but not be limited to):

1. Choice of starting materials and their source
2. Proposed synthetic procedures, anticipated difficulties and possible alternatives
3. Purification procedures expected to be useful
4. Analytical procedures to be used for characterizing the final product
5. Documentation (in the form of literature references or unpublished data) that each proposed synthetic and analytical procedure is suitable for the problem at hand.

It is anticipated that one or more contracts may be awarded as a result of this RFP. During the initial year of the contract, task orders representing the different contracts will be issued periodically. The type of contract method (i.e. cost-plus-fixed-fee, fixed price, etc.) employed for each task order will vary with each order issued and will be subject to negotiation.

For purposes of estimation it is assumed that the approximate level of effort will include one man year each of a synthetic organic chemist and an analytical chemist.

Contract Specialist: Dorothy Sirk
Cause & Prevention
301-496-6361

RFP NO1-CN-55211-03

Title: *Evaluation of early detection of carcinoma of the cervix by cytological screening*
Deadline: *March 14*

(A brief summary of this RFP appeared previously)

While cytological screening by the Papanicolaou (Pap) smear has now been in use for over 20 years, there has never been a vigorous test of its effect on incidence of and mortality from invasive carcinoma of the cervix. There is no doubt that both invasive and in situ cervical carcinoma can be detected by the Pap smear. The important question is what is the quantitative impact on incidence and mortality of invasive disease in a total community?

The objective of this evaluation is to develop a means of measuring the effect of a well-run Pap screening program on the incidence and mortality of invasive cervical cancer in a community setting over a suitable period of time.

Task 1. Review of related materials

The contractor will be required to review and summarize the relevant information concerning cytological screening programs and trends in the incidence and mortality of cervical cancer which has been published in the last five years. This will help to identify key issues; evaluate methodologies and test protocols; and identify communities with large numbers of women at high risk for cervical cancer; all of which can be utilized in the design and implementation of this evaluation.

Task 2. Evaluation design

This evaluation will entail: 1) locating a community with a statistically significant number of women at high risk for cervical cancer; 2) identifying and recruiting these high risk women into a tightly controlled, well-run cytological screening program; and 3) close examination of incidence and mortality figures for that community for invasive cervical cancer over a statistically significant period of time to determine if the well-run cytological screening program had any effect. Further, to control for the possibility of a national trend of decreasing incidence and mortality of invasive disease which may have nothing to do with a screening program, a comparison of incidence and mortality of invasive disease figures will be made with a matched, control community. It is expected that the women in this control community will have access to whatever screening procedures are

normally available.

Task 3. Conduct of evaluation

The contractor shall, after any required methodology clearances and the approval of the project officer of a field work plan; 1) identify and recruit the women to be screened under this procurement according to approved design; 2) implement the screening program according to approved protocols; 3) develop interim reports of findings as required by project officer and as set forth below on both screened population and the control population. Detailed records of the costs of the screening program shall be maintained so that costs for such national screening programs can be estimated.

Task 4. Analyses of data collected and preparation of final report

Contractor will analyze data and submit a report annually on operational aspects of this evaluation as well as the end results.

Contract Specialist: Donald W. Broome
Control & Rehabilitation
301-427-7984

RFP NCI-CP-VO-53523-63

Title: *Studies to determine a viral involvement of mammary carcinoma of animals (excluding the human and the mouse)*

Deadline: *April 15*

The Virus Cancer Program is seeking research proposals from individuals and organizations to formulate and conduct studies to determine a possible viral involvement in animal mammary carcinoma (excluding the human and murine systems). Proposals related to the accomplishment of the goal stated in the first sentence will be considered on the basis of their scientific merit.

Contract Specialist: Jacque M. Labovitz
Cause & Prevention
301-496-1781

CONTRACT AWARDS

Title: Resynthesis of bulk drugs and chemicals
Contractor: Monsanto Research Corp., $54,833.

Title: Synthetic and biochemical approaches to chemotherapy of cancer
Contractor: Collaborative Research, Inc., Waltham, Mass., $89,544.

Title: Isolation of tumor inhibitors from plant sources
Contractor: Univ. of Virginia, $180,000.

Title: Breast cancer detection demonstration project
Contractor: St. Vincents Medical Center, Jacksonville, Fla., $177,000.

Title: A study of the streptovaricins and related compounds
Contractor: Univ. of Illinois, Urbana, $55,000.

Title: Evaluation of the antitumor properties of streptovaricin
Contractor: New York State Dept. of Health and Health Research, Inc., $107,538.

SOLE SOURCE NEGOTIATIONS

Proposals listed here are for information purposes only. RFPs are not available.

Title: Carcinogenesis bioassay data support system
Contractor: Wolf Research and Development Corp., Riverdale, Md.

Title: Provide iso-antigenic and cytogenetic monitoring of mouse tumors and strains
Contractor: New York State Dept. of Health, Health Research Inc.

SOURCES SOUGHT

The following solicitation has been made by the NIH Div. of Contracts & Grants. A formal RFP will be issued in March. Contact Fred L. Suggs, Research Contracts Branch, DCG, NIH, Bethesda, Md. 20014. Telephone 301-496-4487.

Title: *Long-term study on the effects of ingested asbestos in experimental animals*

The specific protocol is not yet available. However, a major study is anticipated which would involve administration of asbestos fiber types in food or water. Sufficient quantities of asbestos fiber will be supplied to the contractor. It is anticipated that the study will utilize animal strains with a demonstrated potential to develop gastrointestinal tumors when exposed to a chemical carcinogen. Since the studies are expected to encompass the lifetime of the experimental animals, the contractor would be required to allocate and maintain 7-10 animal rooms that will:

1. Insure maximum survival of specific pathogen-free animals.
2. Avoid introduction of undesired contaminants.
3. Assure safe handling and disposal of test materials.

The prospective contractor is expected to provide complete pathologic workups by personnel qualified to evaluate changes in experimental animals.

The Cancer Letter —*Editor* JERRY D. BOYD

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