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DCT Board Approves More Than $25 Million In Contract Recompetitions; Two New Contracts

The Div. of Cancer Treatment Board of Scientific Counselors approved recompetition of contracts worth an estimated total of $25.7 million, with the amount to be spread over three to five years. Included in that

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In Brief

Phillip Sharp Selected Next MIT President; Montgomery Retires From SRI Administration

PHILLIP SHARP, director of the Massachusetts Institute of Technology Center for Cancer Research, has been selected by the MIT governing board as the school's new president, ending a search that began last summer after the current president, Paul Gray, announced he would retire this June. Sharp received the Albert Lasker Basic Medical Research Award in 1988 for his work clarifying the functions of genetic material inside cells. . . . **JOHN MONTGOMERY** is giving up his administrative duties as senior vice president of Southern Research Institute, a position he has held since 1981, to devote his time to research. He is a member of the President's Cancer Panel. . . . **MARK ISRAEL,** a molecular biologist and section chief in the Pediatrics Branch of NCI's Div. of Cancer Treatment, has accepted a position as professor at Univ. of California (San Francisco). . . . **GORDON CRAGG,** a nationally known natural products chemist, has been appointed chief of the Natural Products Branch in NCI's Developmental Therapeutics Program. . . . **PATRICK FORREST,** Univ. of Edinburgh, a breast cancer surgeon, will be taking a sabbatical year with Kenneth Cowan, chief of the Breast Cancer Section in NCI's Medicine Branch. He will teach, write and see patients. . . . **FREDERICK BECKER,** scientific director of the Tumor Institute at Univ. of Texas M.D. Anderson Cancer Center, has been elected Corresponding Academician of the Royal Academy of Physical and Natural Sciences of Spain. . . . **UNIV. OF KANSAS** Cancer Center is seeking a permanent director. Jane Henney, vice chancellor for health programs and policy at the university's Medical Center, has been acting director while a search continues. Candidates must have a doctoral degree in the health sciences and a significant scholarly record in cancer research, as well as appropriate administrative experience. Chairman of the search committee is Stephen Russell, phone 913/588-4705. . . . **ARIZONA CANCER** Center was the first to apply for NCI designation as a comprehensive cancer center through the administrative review process. The center's request for comprehensive status two and a half years ago spurred the creation of the new guidelines for comprehensive cancer centers.

DCT Board OKs More Than $25 Mil. In Contract Recompetitions

(Continued from page 1)

amount were two new contracts in the Developmental Therapeutics Program for which the board also gave concept approval at its meeting last week.

One new contract will provide an estimated total of $3.75 million over five years for master agreements for pharmacology studies. Another will provide an estimated total of $2.25 million over three years for two to three contracts for synthesis of natural products. The board approved an estimated total of more than $11 million for recompetition of other DTP contracts.

Also approved was recompetition of the contract that provides lymphokine activated killer cells and tumor infiltrating lymphocytes to NCI's Surgery Branch. Recompetition of contracts in the Cancer Therapy Evaluation Program and the Biological Response Modifiers Program were also approved.

The board also approved a concept for a noncompetitive contract, "Information services in support of cancer treatment research," which will provide an estimated $170,000 a year for three years to the Japanese Foundation for Cancer Research, which gathers information on cancer therapy developed in Japan, translates it into English and provides it to DCT.

In addition, the board approved an estimated total of nearly $12 million in recompetition of AIDS contracts, with the amount to be spread over three to five years. Those concepts are published in the Feb. 23 issue of **AIDS update.**

Concept statements for the competititive contracts follow. All were approved unanimously.

To provide human lymphokine activated killer cells and tumor infiltrating lymphocytes for therapeutic administration and patient protocols. Recompetition of a contract held by Litton Bionetics. Estimated annual amount $1.2 million a year, rising to $1.7 million in FY 1993. Estimated total $4.366 million, three years.

The purpose of this contract is to expand and provide both LAK cells and TIL for administration in patient protocols. Patients receiving adoptive cellular transfer receive enormous numbers of cells, therefore, this involves a massive laboratory effort to expand these cells to therapeutic numbers.

NCI's Surgery Branch has been investigating the use of adoptive cellular immunotherapy for the treatment of cancer. Beginning with preclinical animal models, the branch has demonstrated that immune cells can be isolated from the tumor bearing host, activated or expanded in vitro and readministered to a tumor bearing host to successfully treat established tumors.

Alternatively, a large body of work using animals immunized against tumors has shown that the tumor specific T cells can mediate the regression of murine tumors. The branch described a technique in 1980 for growing the T cells that infiltrate tumors in culture, activating them with interleukin-2 and subsequently transferring them in cellular adoptive immunotherapy models. Protocols have been ongoing to investigate the use of both LAK cells and tumor infiltrating lymphocytes in the adoptive immunotherapy of patients with metastatic cancer.

A recent review of Surgery Branch experience found that 343 courses of LAK cell therapy have been administered to 214 patients and 85 courses of TIL therapy administered to 66 patients. LAK therapy has a combined partial and complete response rate of 25 percent in patients with a variety of metastatic malignancies. Automated techniques for culturing LAK cells in IL-2 and for transferring and expanding TIL in culture have been devised.

The majority of patients with melanoma were found to have TIL that could specifically recognize their tumor as opposed to melanomas or other tumors in other patients. This represents the most convincing evidence to date that the patient bearing a progressive tumor can mount a specific, cellular immune response against that tumor.

Efforts are ongoing to identify and clone the genes responsible for these tumor specific antigens recognized by TIL. Another area of investigation has been directed at studies of the survival, traffic and localization of TIL within the tumor bearing host. A collaborative effort has begun with the National Heart, Lung & Blood Institute to investigate the genetic modification of TIL to genetically mark these cells for in vivo survival and localization studies.

Much of this work revolves around the basic clinical TIL protocol. This protocol depends heavily on the contracted production of TIL to allow investigators to pursue modifications, improvements and novel ideas in TIL therapy.

The randomized trial involving IL-2 and IL-2 plus LAK cells continues for patients with non-Hodgkin's lymphoma. A protocol investigating the possible combined benefits of IL-2, LAK and the L6 anticolorectal monoclonal antibody is continuing. The TIL and IL-2 protocol continues with the introduction of modifications to investigate the adjunctive role of local radiation therapy, alpha interferon and genetic modification of TIL.

Laboratory efforts are continuing to use TIL to identify tumor specific antigens and clone the genes for these antigens. The TIL survival and localization studies using genetically modified TIL are ongoing. Eventually, genetic modification of TIL could be used to construct an immune cell with improved antitumor capabilities.

Mechanism of action and biochemical pharmacology studies. This is a new contract involving master agreements with task

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orders, five to six tasks per year. Proposed annual amount $750,000, for an estimated total of $3.75 million over five years.

Potential new anticancer agents are being identified by an in vitro screen using a diverse panel of human tumor cell lines arrayed in disease specific subpanels. Compounds demonstrating specific differential cytotoxic or growth inhibitory effects are considered for further evaluation.

The Developmental Therapeutics Program wishes to evaluate the biochemical mechanism of action of such agents to help determine reasons for their specificity, and to help set priorities for development. Compounds that demonstrate biochemical mechanisms of action that are different from clinically established antitumor agents would have a high priority for development.

This procurement would be made through a master agreement/task order mechanism. Studies on the mechanism of action and biochemical pharmacology of newly discovered compounds will require a diverse range of scientific expertise and the specific studies performed may vary greatly from compound to compound.

Mechanistic evaluation may be done using cell lines identified by the initial screen as either sensitive or insensitive to a given agent. Studies to be performed will involve cultured cells, cellular extracts or purified cellular components, as well as intact animals and isolated tissues.

Specific biochemical effects to be evaluated may include but are not limited to: induction of DNA damage, perturbation of RNA processing, changes in nucleotide pool sizes, DNA binding, inhibition of specific cellular enzymes (DNA polymerases, primases and methylases; enzymes of de novo purine and pyrimidine synthesis; salvage enzymes; topoisomerases 1 and 2), inhibition of macromolecular synthesis, effects of tubulin and the mitotic spindle, and interactions with cell membrane components such as protein kinase C, G proteins and other receptors involved in signal transduction, growth regulation, differentiation and oncogene expression.

The specific studies to be done will be defined by the nature and structure of the test compound and any background data available.

The purpose of this procurement is to provide a resource for the study of biological mechanisms of action of potential antitumor agents identified by the human tumor cell line screen. Data obtained in these studies will be used to evaluate the uniqueness of identified leads and will aid in the establishment of priorities for further development. In the initial stages of drug discovery, which frequently includes compounds under confidentiality agreements, it is important for program staff to be able to direct specific, focused studies on various agents of interest in a relatively short time frame. The proposed master agreements will provide such a resource.

Natural products lead-based synthesis. This is a concept for a new procurement, proposed annual amount $750,000 ($250,000 cancer; $500,000 AIDS), estimated total $2.25 million, three years, two to three contracts.

Natural products form a very important source of structural leads for the antitumor and AIDS antiviral screens. Compounds in this category differ from synthetics in that they are seldom part of a large series. The donor of a natural product will typically have isolated no more than a dozen or so cogeners that are structurally related. The structure-activity relationships for a natural product lead can usually be developed only by testing analogs obtained by total or partial synthesis. Donors are seldom set up to carry out synthetic work; development of a lead thus involves sponsoring such work at a more specialized facility. There are currently several leads, such as the rare alkaloid rohitukine, which potentially could be used as starting points for such a program.

Availability of a contract dedicated to the synthesis of cogeners of active leads--whether those represent donated samples, compounds obtained from the in-house natural products program, or even agents identified in the literature--will put DTP in a better position to follow up on compounds that show activity in one of the screens. Factors including the level of activity of the lead and the availability of synthetic methodology will be used in selecting targets for the synthesis.

Objects of this contract are: to optimize the therapeutic activity of a natural product lead by investigation of structure-activity relationships by preparation of analogs by chemical synthesis; to prepare lead compounds not available from original sources; to prepare derivatives or more soluble salts of natural product leads; to respond to program interest and priority for such natural products. Two or three contracts will be awarded.

Synthesis of congeners and prodrugs. Recompetition of contracts held by Purdue Research Foundation and State Univ. of New York (Buffalo). Estimate annual amount $750,000, estimated total $3.75 million, five years, three contracts.

Prior to the initiation of this project in 1982, no mechanism existed that allowed for synthesis work that was necessary to advance novel but flawed lead compounds possessing poor solubility, stability or narrow spectrum of activity to DN2 level. The objective of this contract was to fill this gap. The goals of the contract were to synthesize compounds with improved stability, solubility or wider spectrum of activity necessary for advancement to DN2 level.

Since this effort was initiated, several clinical candidates have emerged. Examples: Pyrazine diazohydroxide was selected from a group of more than 90 synthesized analogs. The IND was filed Nov. 1. Tetraplatin, a metal complex with good L1210/cisplatin activity, has been licensed to the Upjohn Co. Clinical trials are scheduled for early 1990. Carmethizole, a bis-cabamate pyrrolizine derivative, was scheduled for toxicology study in Europe in January. Other compounds of promise are a water soluble taxol prodrug, which shows improved activity in the B16 model, a novel silicon-containing platinum complex, which has shown superior cellular uptake when compared with cisplatin, and a modified C-terminal nonapeptide fragment of bombesin, which has demonstrated antagonist activity.

The leads emerging from the new in vitro screen will be structurally optimized through these contracts. As in the past, broad knowledge and expertise in modern organic chemistry and drug design strategies will be utilized to achieve the desired optimization. The use of biochemical rationales, whenever available, is an essential aspect of the design of novel analogs that can provide significant improvements over the parent structure. Varied strategies of drug design will be explored, including substructure searches, molecular modeling, QSAR and x-ray as needed.

Three contracts will be awarded to highly skilled organic/medicinal chemistry teams. Their goal will be to optimize novel leads derived from NCI's new cancer cell line screen. During this period the in vitro cancer screen will become fully operational at the rate of 10,000 compounds a year, which will produce several leads for optimization.

Plant collections and taxonomy. Recompetition of contracts held by Missouri Botanical Garden, New York Botanical Garden and Univ. of Illinois at Chicago. Estimated annual amount $750,000 (100 percent AIDS funding), estimated total $3.75 million, five years, estimated three contracts.

Plants have been a major source of new drugs for thousands

of years and have yielded a number of clinically active antitumor agents, including the Vinca alkaloids, taxol and homoharringtonine, as well as the basic structural leads for the epipodophyllin glycosides, VP-16 and VM-26. A wealth of other active, novel structure types have been discovered, which are undergoing modification in laboratories around the world and which have good potential for eventual production of clinically useful analogues.

The number of plants screened to date for anticancer activity represents only 10 to 20 percent of those available, while even fewer have been screened for antiviral activity. There are large areas of the world with unique flora that have been little examined, particularly China, Southeast Asia and rain forest areas in Africa, Madagascar and Latin America.

Collections of 4,500 samples per year are currently focused in the tropical regions of Africa, Southeast Asia, and Latin America. Samples of 0.5 to 1.0 kg of different plant parts, such as leaves, bark, stems, and roots, are dried, packed in cloth bags and shipped to the Natural Products Repository at the Frederick Cancer Research Facility where they are stored at -20.C. After grinding, samples are extracted with an organic solvent and water, and the extracts returned to the repository for low-temperature storage.

As screening capacity becomes available, small samples of each extract are tested for AIDS antiviral and antitumor activity. When significant activity is observed, bulk extracts are subjected bioassay-guided fractionation with a view to isolating the active components. When necessary, large-scale recollections of active plants are undertaken to provide sufficient material for further development.

Up to October 1989, over 15,500 plant samples representing 310 families and 1,690 genera had been collected, and over 11,000 extracts had been prepared. Of these, 6,523 have been submitted for testing in the AIDS antiviral screen, and 612 have exhibited preliminary in vitro activity. Over 100 of these extracts are in various stages of fractionation, and several knew classes of anti-HIV active compounds have been identified.

Multiple contracts for the continued collection of 4,500 plants per year from tropical regions worldwide will be awarded for a five-year period. The number of samples collected during the current contracts will be in the range of 20,000 to 25,000 and will represent approximately 7,000 species. The number of plant species occurring in tropical regions is estimated to be up to 150,00, and less than 1 percent of these have been investigated chemically. The potential for new drug discovery from tropical plants thus remains very high.

Two of the present contracts are with organizations that are well established in many African and Latin American countries, and which have good local contacts and operating infrastructures. Collection costs have been kept relatively low, and both organizations have borne a certain amount of undeclared cost sharing. The estimated annual amount for the new contracts has been increased to make allowance for these factors. In addition, extra funds will need to be budgeted in new contracts to allow for greater support of, and interaction with, scientific institutions and personnel in collection countries.

The involvement of local expertise is essential to the success of the collections, and experience with the present contracts has shown that local herbaria need some support to handle the voucher specimens provided by the NCI collection contractors, and to maintain their own herbarium voucher collection, which is of great value to NCI collectors in aiding the identification of collected species.

Resynthesis of compounds for screening. Recompetition of three contracts held by Southern Research Institute, Starks Associates and New Mexico State Univ. Estimated annual amount $800,000 (40 percent cancer, 60 percent AIDS), estimated total $2.4 million, three years.

This effort was previously titled "Chemical Synthesis of Anti-AIDS Compounds." It has been retitled to reflect the program commitment to both cancer and AIDS and for greater flexibility in making timely responses to priorities. These are the only resynthesis projects in support of the screens that will test tens of thousands of compounds a year.

Once a compound is identified as active in a screen, additional amounts are needed for further evaluation. These amounts are often unavailable from the original supplier, for various reasons. Synthetic capacity dedicated to the reprepartion of moderate amounts (0.1 to 5.0 grams) of active leads is essential to the drug.

Chemists on the existing contracts have synthesized samples of critical importance to DTP in response to specific requests from program staff. These include gram amounts of active leads. Generally, these efforts are based on existing detailed directions, but in some cases improved syntheses and better product purity were needed. Also prepared are particular analogues of active leads or gram amounts of synthetic intermediates.

About 200 intermediates and target compounds per year are being synthesized by these contracts. This includes all types from inorganic compounds to complex organic molecules. Hypericin has been synthesized as an intermediate for further structural modifications. A series of myristoylation inhibitors have been supplied to intramural staff. Program staff in the Drug Synthesis and Chemistry Branch are in close contact with these contractors, and priorities are updated in accordance with DTP needs.

Continuing capacity for resynthesis of 0.1 to 5.0 grams of lead compounds is essential for confirmation of in vitro activity, to test for in vivo activity, and for additional biological tests. Scheduling and planning of the tasks will be flexible and responsible to DTP priorities. These projects are to accommodate the needs for followup from both AIDS and cancer screens, each with a potential capacity for testing over 10,000 compounds a year. The results will often be useful to NIH grantees and other suppliers who lack resources to do resynthesis. Three contracts will be awarded.

Cultivation of cyanobacteria (blue-green algae). Recompetition of a contract held by Univ. of Hawaii at Manoa. Estimated annual amount $295,000 (100 percent AIDS funding), estimated total $1.475 million, five years.

Cyanobacterial (blue-green algae) are a group of photosynthesizing microorganisms, which have been sparsely investigated from a chemical viewpoint. Recent research, however, has resulted in the isolation of novel structure types that exhibit potent in vitro antitumor activity. Examples are the oscillatoxins from Oscillatoria nigroviridis and debromoaplysiatoxin from lyngbya majuscula.

In addition, the in vitro antitumor activity of some sponges appears to be correlated with the association between the animal and cyanobacteria, while the degree of antitumor activity of certain mosses has been shown to correlate with the abundance of associated cyanobacteria.

The present contract for cultivation of cyanobacteria involves the isolation and culturing of 200 organisms per year, and the preparation of extracts of the cell masses for submission to the Natural Products Repository at the Frederick Cancer Research Facility, where they are stored at -20 degrees C. As screening capacity becomes available, samples of each extract are tested for AIDS antiviral activity and antitumor activity.

When significant activity is observed, organisms are regrown

on a scale sufficient to produce enough extract to permit bioassay-guided fractionation and isolation of the active components. Cultures are cryopreserved and stored in liquid nitrogens refrigerators at Frederick. Detailed records of growth conditions and taxonomy are submitted for each organism cultured.

Up to October 1989, a total of 595 cyanobacteria have been cultivated, and 1,190 extracts prepared. Of these 760 have been submitted for testing in the AIDS antiviral screen, and 72 have exhibited in vitro activity. Fifty extracts have been partially fractionated, and a novel class of anti-HIV agents, the sulfonic acid-containing glycolipids, has been isolated from the organic extracts of lyngbya lagerheimii and phormidium tenue.

A contract for the cultivation of 200 cyanobacteria per year will be awarded for a period of five years. The present contract has concentrated on cyanobacteria isolated from terrestrial sources. Under a new contract, emphasis will be placed on the cultivation and extraction of cyanobacteria isolated from marine sources. The chemical types of secondary metabolites produced by marine organisms are generally quite different from those produced by terrestrial organisms, and it is anticipated that this program would result in the isolation of novel active lead compounds.

Collection, storage, quality assurance and distribution of biological response modifiers. Recompetition of a contract held by Hazleton Biotechnologies Co. Proposed first year award, $450,000, estimated total $ 2.25 million, five years.

The Biological Response Modifiers Program has the responsibility for the procurement, quality assurance, control and distribution of various BRMs to qualified preclinical and clinical investigators. The purpose of this contract will be to provide effective management of these functions for the BRMP.

The contractor will be responsible for the receipt, dispensing, storage, distribution and inventory control of biologic agents. Quality assurance and control evaluation involves specific assays for sterility, pyrogenicity, endotoxin levels, general safety testing and preclinical studies related to safe dose and route of administration.

The contractor will be responsible for processing, vialing, labeling and potency and purity testing of biologics obtained in bulk form for laboratory or clinical use. In some instances, production and initial purification of biologics, such as monoclonal antibodies for preclinical laboratory use or clinical trials will be performed. All procedures will conform to FDA specifications for biologic development and will be in compliance with government regulations for human use products.

The contractor also will be responsible for the development of master files and investigational new drug applications on biologics developed in the BRMP, in other programs of NIH, and in cooperation with extramural organizations supplying biologics for clinical evaluation.

The aim of this initiative is to select a contractor who will provide an NCI-wide capability for the development of monoclonal antibodies and other biologicals for preclinical and early clinical trial development.

Clinical trials data management support (part A) and information management support (part B). Recompetition of a contract held by EMMES Corp. Estimated annual amount for Part A is $202,500, and for Part B, $247,500; estimated total $1.35 million, three years.

The Cancer Therapy Evaluation Program is responsible for the administration and coordination of most of the extramural clinical trials supported by the Div. of Cancer Treatment. One contract is currently in existence to provide operations office/data management support services for selected extramural clinical trials (Part A) and provide support services for information retrieval, organization and presentation (Part B). For this recompetition, CTEP plans to issue two RFPs for support services for extramural clinical trials.

Specific requirements for Part A include:

1. Data management personnel and facilities to support extramural Group C clinical trials sponsored by NCI.

2. Data management personnel and facilities to support CTEP sponsored and coordinated intergroup activities.

3. Data management personnel and facilities to support CTEP coordinated (non-cooperative group) multicenter studies.

Specific requirements for Part B include:

1. Capability to manage a clinical trials tracking data base.

2. Experience in retrieval of scientific information from currently available data bases.

3. Experience in contributing to the generation of scientific (cancer related) publications.

4. Ability to analyze program data to assist staff in the development of future priorities and initiatives for clinical research.

The contractor for Part A will continue to provide the kind of statistical, data management and operations support that assists in the conduct of CTEP's Group C protocols and other collaborative trials as they are developed, such as a study of all-trans-retinoic acid in acute promyelocytic leukemia.

The contractor for Part B will increase its role in the development of scientific manuscripts, to include minutes of strategy meetings, and reviews on appropriate topics. The contractor also will maintain and update, as needed, the computerized clinical trials tracking system.

Conference and logistical support services. Recompetition of a contract held by Social and Scientific Systems Inc. Estimated annual amount $75,000, estimated total $375,000, five years. Minority small business set-aside.

The Cancer Therapy Evaluation Program is responsible for the administration and coordination of most of the extramural clinical trials supported by the Div. of Cancer Treatment. These programs include the activities of the Clinical Cooperative Groups, the phase 1 and phase 2 new agent development contractors, and the recipients of investigator initiated grants. CTEP plans to obtain the services of a contractor to provide conference management and logistics support.

The incumbent contractor provides support services for conference management and associated general logistical activities for CTEP. Logistics support includes various technical and clerical tasks ranging from report design and preparation to routine typing.

Conference support includes both pre and post conference management activities necessary to conduct and manage meetings and provide the results to the biomedical research community.

Seventy-two tasks have been undertaken by the incumbent contractor since 1982. They have supported meetings of scientific importance to the extramural clinical programs. Examples of these meetings include the phase 1 and 2 Working Group meetings, disease strategy meetings, LAK/IL-2 Working Group meetings, biostatistical methodology meetings and meetings on reimbursement problems. Minutes from the meetings have been produced and distributed.

It is anticipated that the new contractor will continue to support eight to 10 meetings per year.

The estimated cost for this contract is based on the actual level of effort expended by the contractor over the past several years and the estimated number of meetings per year expected in the future.

NCI Adds $25 Million To RO1, PO1 Grant Pool In Fiscal Year 1990

NCI has increased funding for competing grants by 15 percent this fiscal year, adding nearly $25 million to the competing grants budget, which includes AIDS funding, NCI Director Samuel Broder told the National Cancer Advisory Board at its recent meeting.

The amount in the competing grants line will rise from $158.7 million in FY 1989 to $183.4 million in FY 1990.

Despite the increase, budgets for competing grants have to be cut by 10 percent; 4 percent cuts were necessary for noncompeting grants. These "downward negotiations" were 1.6 percent for noncompeting grants and 13.5 percent for competing grants in FY 1989.

The number of competing grants that will be funded rose from 728 in FY 1989 to 766 in FY 1990. Broder estimated that 26 percent of approved competing grants will be funded this fiscal year.

The payline for RO1s is estimated at the 17th percentile. New and competing research project grants will be funded at 90 percent of recommended levels, Broder said.

The number of noncompeting grants will fall, from 2,374 in FY 1989 to 2,353 in FY 1990, though funding for them remains the same, at about $564 million.

NCI's total budget for FY 1990 is $1.664 billion. However, the Gramm-Rudman budget sequestration will cut about $23 million, and other cuts totalling another $10 million, mandated by Congress, will be made.

The Institute may lose another $6 million that is to be set aside for creation of a new agency for health care policy and research at NIH.

NCI's FY 1990 budget, minus the estimated $39 million in reductions, would total about $1.625 billion.

Broder was scheduled to testify this week on the FY 1991 President's budget before the Senate Labor, HHS, Education Appropriations Subcommittee. He is scheduled to testify March 13 before the counterpart committee in the House.

41 CCOPs Reported In Range Of Funding For Recompetition

Following is a list of 41 Community Clinical Oncology Programs that have been reported to **The Cancer Letter** as probably being in the funding range for the "CCOP 3" recompetition.

NCI has not released a payline for the program; CCOPs listed here are those that scored better than 232, the payline in the previous competition.

CCOPs in the probable funding range that are not on this list are invited to call **The Cancer Letter** at 202/543-7665 for inclusion in a later issue.

Allegheny CCOP, Pittsburgh, Reginald Pugh, PI
Atlanta Regional CCOP, Ernest Franklin, PI
Bergen-Passaic CCOP, Hackensack, NU, Richard Rosenbluth, PI
Billings CCOP, (no PI given)
Cedar Rapids CCOP, Martin Weisenfeld, PI
Central Illinois CCOP, Gale Katterhagen, PI
Central Los Angeles CCOP, Cary Presant, PI
Columbia River CCOP, Portland, OR, Gordon Doty, PI
Columbus, OH, CCOP, Jerry Guy, PI
Dayton CCOP, James Ungerleider, PI
Duluth CCOP, James Krook, PI
Eastern Maine Medical Center CCOP, Philip Brooks, PI
Geisinger Clinic CCOP, PA, Albert Bernath, PI
Grand Rapids CCOP, James Borst, PI
Greater Phoenix CCOP, David King, PI
Green Mountain CCOP, VT, James Wallace, PI
Illinois Oncology Research Assn. CCOP, James Gerstner, PI
Indianapolis CCOP, Lloyd Everson, PI
Indianapolis Methodist CCOP, William Dugan, PI
Iowa Oncology Research Association CCOP, Rosco Morton, PI
Kalamazoo CCOP, MI, Phillip Stott, PI
Kansas City CCOP, Robert Belt, PI
Marshfield Medical Research Foundation CCOP, Tarit Banerjee, PI
Medical Center of Delaware CCOP, Irving Berkowitz,PI
Mount Sinai CCOP, Miami, Mark Wallack, PI
Natalie Warren Bryant CCOP, Tulsa, Alan Keller, PI
North Shore Univ. Hosp. CCOP, Vincent Vinciguerra,PI
Northwest CCOP, Tacoma, WA, Erving Pierce, PI
Ochsner CCOP, New Orleans, Carl Kardinal, PI
Sacramento CCOP, Vincent Caggiano, PI
San Francisco CCOP, Peter Eisenberg, PI
Southeast Cancer Control Consortium CCOP, NC, Charles Spurr, PI
Southern Nevada Cancer Research Foundation CCOP, John Ellerton, PI
Spartanburg, SC, CCOP, John McCulloch, PI
St. Luke's Hospitals CCOP, ND, Greg McCormack, PI
St. Vincent's Hospital CCOP, Margaret Kemeny, PI
Toledo CCOP, Charles Cobau, PI
Twin Tiers CCOP, Binghamton, NY, and Sayre, PA, Bruce Boselli, PI
Virginia Mason CCOP, Seattle, Albert Einstein, PI
West Metro Minneapolis CCOP, P.J. Flynn, PI.
Wichita CCOP, Henry Hynes, PI

NCI Advisory Group, Other Cancer Meetings For March, April, Future

Div. of Cancer Etiology Board of Scientific Counselors--March 1-2, NIH Bldg 31 Rm 10. Open 1 p.m.-recess March 1, 9 a.m. to adjournment March 2.

ICN-UCI International Conference on Virology: Viruses That Affect the Immune System--March 1-3, Newport Beach, CA. Hotel Meridien. Contact Nita Driscol, ICN-UCI Symposium Office, Cancer Research Institute, Univ. of California, Irvine, CA 92717, phone 714/856-5886.

Advances in Immunodiagnosis and Immunology of Cancer--March 1-3, Fort Lauderdale, FL. Contact Janice Ford, Wistar Institute, 3440 Market Street Suite 420, Philadelphia, PA 19104, phone 215/662-6904.

Columbus Cancer Conference: Diagnosis & Treatment of Gynecologic & Prostate Cancer--March 2, Columbus, OH. Embassy Suites Hotel. Contact Riverside Methodist Hospitals, phone 614/261-4475

Biology of Human Malignant Lymphomas--March 5-6, Bordeaux, France. Contact F. Capuron, Unite 117 INSERM, 229 cours de l'Argonne, 33076 Bordeaux Cedex, France.

Combining Biological Response Modifiers With Cytotoxics in the Treatment of Cancer: Developing a Rational Approach to a New Therapy--March 5-7, Baltimore, MD, Omni Inner Harbor Hotel. Contact Abbe Smith or Debra Casey, TRI, phone 301/770-3153, or Dr. Mace Rothenberg, phone 301/496-6404.

7th Annual Advances in Cancer Treatment Research/2nd Autologous Bone Marrow Transplantation Symposium--March 7-9, Grand Hyatt Hotel, New York City. Contact Office of Continuing Medical Education, Albert Einstein College of Medicine, 3301 Bainbridge Ave., Bronx, NY 10467, phone 212/920-6674.

Sixth International Conference on Adjuvant Therapy of Cancer--March 7-10, Arizona Cancer Center, Tucson, AZ. Abstract deadline Dec. 1. Contact Mary Humphrey, Arizona Cancer Center, Univ. of Arizona College of Medicine, Tucson, AZ 85724, phone 602/626-2276, fax 602/626-2284.

Third International Conference on the Interaction of Radiation Therapy and Systemic Therapy--March 9-12, Asilomar Conference Center, Monterey, CA. Contact Suzanne Bohn, American College of Radiology, 1101 Market St., 14th Floor, Philadelphia, PA 19107, phone 215/574-3181.

International Conference of Chronopharmacology & Chronotherapeutics--March 12-15, Nice, France. Contact Dr. Alain Reinberg, Fondation A. de Rothschild, 29, rue Manin, 75940 Paris, Cedex 19 France, fax no. 1-4803-6590.

Biology of Sarcomas--March 11-16, Lake Tahoe, CA. Granlibakken Resort. Contact UCLA Symposia, 2032 Armacost Ave., Los Angeles, CA 90025.

Hemopoietic Growth Factors--March 12-14, Paris, France. Contact European School of Haematology, Centre Hayem, 1, avenue Claude Vellefaux, 75475 Paris Cedex 10, France.

American College of Radiology 24th National Conference on Breast Cancer--March 15-18, New Orleans, LA. Contact Educational Services, 1891 Preston White Dr., Reston, VA 22091, phone 703/648-8964.

Fifth International Conference on Monoclonal Antibody Conjugates for Cancer--March 15-17, San Diego, CA. Sheraton Harbor Island East Hotel. Contact Cass Jones, Professional Conference Management, 7916 Convoy Court, San Diego, CA 92111, phone 619/565-9921.

Head and Neck Cancer Rehabilitation--March 15-18, Dearborn, MI. Ritz Carlton Hotel. Contact Wayne State Univ. School of Medicine, Dept. of Otolaryngology, 4201 St. Antoine, 5E-UHC, Detroit, MI 48201, phone 313/577-0804.

Community Cancer Care--March 15, 22 and 29, Coraopolis, PA. Robert Morris College Moon Township Campus. Contact Denise Brooks, 412/624-7899.

Symposium on Recent Advances in Cancer Therapy--March 16-17, Denver, CO. Univ. of Colorado Cancer Center. Contact Cancer Education Office, phone 303/270-3005.

Seventh Carolina Conference on Gene Transfer & Expression--March 17-20, Wrightsville Beach, NC. Shell Island Resort. Contact Jo Ann McPherson, Univ. of North Carolina (Chapel Hill), Campus Box 7100, 101 MBBRL, Chapel Hill, NC 27599, phone 919/962-8920.

International Society of Gynecological Endocrinology--March 18-23, Jerusalem, Israel. Contact KENES LTD, PO Box 90006, Tel Aviv 61500, Israel.

BACR 31st Annual Meeting & Assoc. of Cancer Physicians 5th Annual Meeting--March 19-22, Brighton, UK. Contact B. Cavilla, Institute of Biology, 20 Queensberry Place, London SW7 2DZ, UK.

Div. of Cancer Biology & Diagnosis Board of Scientific Counselors--March 19, NIH Bldg 31 Rm 9. Open 9:30 a.m.

American Society of Preventive Oncology--March 19-21, Bethesda, MD. Hyatt Regency-Bethesda. Contact Dr. Richard Love, ASPO, 1300 Univ. Ave.-7C, Madison, WI 53706, phone 608/263-6919.

Health Effects of Omega-3 Polyunsaturated Fatty Acids in Seafoods--March 20-23, Washington. Omni Shoreham Hotel. Contact Dr. Roy Martin, National Fisheries Institute, 2000 M St. NW Suite 580, Washington, D.C. 20036, phone 202/296-5172.

Assoc. of Community Cancer Centers 16th Annual National Meeting--March 21-24, Washington. Hyatt Washington on Capitol Hill. Contact ACCC, 11600 Nebel St. Suite 201, Rockville, MD 20852, phone 301/984-9496.

ICN-UCI Symposium on Molecular Aspects of Development--March 22-25, Dana Point, CA. Dana Point Resort Hotel. Contact Nita Driscoll, ICN-UCI Symposium Office, Cancer Research Institute, Univ. of California, Irvine, CA 92727, phone 714/856-5886.

Computerized Cytology & Histologic Laboratory--March 24-27, Chicago. Contact International Academy of Cytology, 5841 Maryland Ave. HM 449, Chicago, IL 60615.

International Symposium on Minimal Residual Disease in Acute Leukemia--March 28-30, Rotterdam, Netherlands. Contact Congress Secretariat, Leukemia Symposium IMEDEX, Bruistensingel 144, 5232 AC's, Hertogenbosch, The Netherlands.

Diagnosis and Treatment of Neoplastic Disorders: Medical, Surgical and Radiotherapeutic Aspects--March 29-30, Johns Hopkins Medical Institutions, Baltimore, MD. Contact Office of Continuing Education, Turner Bldg, 720 Rutland Ave., Baltimore, MD 21205, phone 301/955-2959.

Molecular Basis of Human Cancer--March 29-30, Chapel Hill, NC. Contact Lineberger Cancer Research Center School of Medicine, Campus Box #7295, Univ. of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7295, phone 919/966-3036.

American College of Surgeons Commission on Cancer: Cancer Management Course--March 30-31, Washington Hospital Center, Washington. Contact Sharon Metzger, phone 202/877-6282.

Receptor-Modulated Transport Systems--March 31-April 6, Keystone, CO. Contact UCLA Symposia, 2032 Armacost Ave., Los Angeles, CA 90025.

Lymphocyte Development--March 31-April 6, Park City, Utah. Contact UCLA Symposia, 2032 Armacost Ave., Los Angeles, CA 90025.

Growth & Differentiation Factors & Development--March 31-

April 7, Steamboat Springs, CO. Contact UCLA Symposia, 2032 Armacost Ave., Los Angeles, CA 90025.

APRIL

World Conference on Tobacco & Health--April 1-5, Perth, Australia. Contact Secretariat, Conference on Tobacco & Health, Locked Bag, Post Office Northbridge, Western Australia.

World Conference on Pain--April 1-6, Adelaide, Australia. Contact World Congress on Pain, Congress Secretariat, PO Box 753, Norwood SA 5067, Australia.

Leukemias--April 2-6, Orta San Giulio, Italy. Contact European School of Haematology, Centre Hayem, 1, avenue Claude Vellefaux, 75475 Paris Cedex 10, France.

Illinois Cancer Council Conference: Cancer Drug Resistance--April 4, Chicago. Contact Patti Jelen, Illinois Cancer Council, phone 312/346-9813.

Community Cancer Care--April 4, 11 & 18, Pittsburgh, PA, Visiting Nurse Assn. of Allegheny County, Seven Parkway Center. Contact Denise Brooks, phone 412/624-7899. The course is also to be held April 27, at Univ. of Pittsburgh School of Nursing, Victoria Bldg.

Recent Advances in Head & Neck Cancer--April 5-6, Ankara, Turkey. Contact Dr. Dincer Firat, Div. of Oncology, Hacettepe Univ. Hacettepe 06100, Ankara, Turkey.

Breast Cancer--April 5-7, Athens, Greece. Contact G. Assimakopoulos, Karneadou Str. 3, Athens 106 75, Greece.

American Medical Assn. Health Reporting Conference--April 5-8, Denver, CO. Contact AMA, phone 312/645-5102.

Milestones in Oncology II--April 6, Leiden, The Netherlands. Contact Dr. P. Bentvelzen, Dutch Society of Oncology, TNO, Lange Kleiweg 151, 2277 GJ Rijswik, The Netherlands.

Radiation Research Society Annual Meeting--April 7-12, New Orleans. Contact Radiation Research Society, 1101 Market St., 14th Floor, Philadelphia, PA 19107.

NIH Consensus Conference: Adjuvant Therapy for Patients With Colon & Rectum Cancer--April 16-18, Masur Auditorium, NIH Clinical Center, Bethesda, MD.

Advanced Bladder Cancer Seminar--April 17-18, San Servolo, Venice, Italy. Contact European School of Oncology, Via Venezian 1, 20133 Milan, Italy.

International Conference on Human Antibodies & Hybridomas--April 18-20, Lake Buena Vista, FL. Contact S.L. Patterson, Butterworth Publishers, 80 Montvale Ave., Stoneham, MA 02180, phone 617-438-8464.

Provocative Topics in Gynecologic Oncology--April 19-20, Baltimore, MD, Harrison's Pier 5 Clarion Inn. In conjunction with Houston Everett Memorial Course in Urogynecology. Contact Program Coordinator, Johns Hopkins Medical Institutions, Office of Continuing Education, Turner Bldg., 720 Rutland Ave., Baltimore, MD 21205, phone 301/955-2959.

International Brachytherapy & Remote Afterloading Symposium--April 19-21, St. Louis, MO. Contact Dr. Carlos Perex, 4511 Forest Park Blvd., Suite 411, St. Louis, MO 63108, phone 314/362-3497.

Molecular Targets for Cancer Chemotherapy: The Dorothy Snider Foundation Forum on Cancer Research--April 20, Memphis, TN. Contact Dr. James Hamner, Univ. of Tennessee-Memphis, 847 Monroe Suite 235, Memphis, TN 38163, 901/528-6354.

Cancer Management Course--April 20-21, Salt Lake City, Utah. Contact Dr. Dirk Noyes, American College of Surgeons, Cancer Department, 55 E. Erie St., Chicago, IL 60611, phone 312/664-4050.

American Radium Society Annual Meeting--April 21-25, Scottsdale, AZ. Contact American Radium Society, 1101 Market St., 14th Floor, Philadelphia, PA 19107.

Annual Congress of Radiotherapy & Oncology--April 22-26, Transkei, South Africa. Contact J.P. Jordaan, PO Box 30168, Mayville 4058, South Africa.

Cytology, Histology & Immune Markers in Leukemias and Lymphomas--April 23-27, Paris, France. Contact European School of Haematology, Centre Hayem, 1, avenue Claude Vellefaux, 75475 Paris Cedex 10, France.

Workshop on Small Cell Lung Cancer Antigens--April 25, London, UK. Contact Courtauld Institute, 5th Floor, 91 Riding House St., London W1P 8BT, UK.

Ambulatory Care Nursing Conference--April 26-27, San Diego, CA. Contact Shirley Kolkey, Conference Coordinator, Meeting Management, 5665 Oberlin Dr. Suite 110, San Diego, CA 92121, phone 619/453-6222.

Anticancer Drug Discovery & Development--April 26-28, Detroit, MI. Contact Dr. Frederick Valeriote, Dept. of Medicine, Wayne State Univ., PO Box 02188, Detroit, MI 48202, phone 313/745-8252.

European Association for Cancer Education Annual Scientific Meeting--April 26-28, Bordeaux, France. Contact Dr. W. Bender, Centre for Medical Education, Groningen Faculty of Medicine, Bloemsingel 1, 9713 BZ Groningen, The Netherlands.

Southwest Oncology Group--April 30-May 2, Denver, CO, Denver Marriott City Center. Contact Marjorie Godfrey, SWOG, 5430 Fredericksburg Rd No. 618, Oak Hills Tower Bldg., San Antonio, TX 78229-6197, phone 512/366-9300.

FUTURE MEETINGS

Advances in MRI Imaging--May 31-June 2, Scottsdale, AZ, Marriott Camelback Inn. Contact Siemens Medical Systems Inc., 1-800-272-3837.

International Congress on Breast Diseases--June 10-14, Boston. Hynes Convention Center. Contact Secretariat, c/o Office of Continuing Education, Tufts Univ. School of Medicine, 136 Harrison Ave. Box 36, Boston, MA 02111, phone 617/956-5657.

International Conference on Chemo-Immumoprevention of Cancer--Aug. 24-25, Vienna, Austria. Contact Vienna Academy of Postgraduate Medical Education & Research, Conference Secretary CCPC-90, Alser Strasse 4, A-1090 Vienna, Austria, phone 43-1-421383; or Dr. Wuan Hong, Univ. of Texas M.D. Anderson Cancer Center, phone 713/792-6363.

Southwest Oncology Group--Oct. 2-4, Columbus, OH, Hyatt Regency Columbus; future meetings: April 12-14, 1991, Phoenix, AZ, Hyatt Regency Phoenix; Oct. 30-Nov. 1, 1991, Dearborn, MI, Hyatt Regency Dearborn. Contact Marjorie Godfrey, SWOG, 5430 Fredericksburg Rd No. 618, Oak Hills Tower Bldg., San Antonio, TX 78229-6197, phone 512/366-9300.

Workshop on Monoclonal Antibodies and Breast Cancer--Nov. 5-6, San Francisco, CA, Miyako Hotel. Contact Carolyn Huls, John Muir Cancer & Aging Research Institute, 2055 N. Broadway, Walnut Creek, CA 94596, phone 415/943-1182.

Chemotherapy Foundation Symposium IX: Innovative Cancer Chemotherapy for Tomorrow--Nov. 7-9, New York City, Sheraton Centre Hotel. Contact Jaclyn Silverman, Div. of Medical Oncology, Box 1178, Mount Sinai School of Medicine, One Gustave Levy Place, New York, NY 10029, phone 212/241-6772.

Radioimmunodetection and Radioimmunotherapy of Cancer--Nov. 15-17, Princeton, NJ. Abstract deadline July 2. Contact Lois Gillespie, Center for Molecular Medicine & Immunology, 1 Bruce St., Newark, NJ 07103, phone 201/456-4600.

International Congress of Radiation Research--July 7-12, 1991, Toronto, Canada. Deadlines: Junior Investigators Awards, Oct. 15; Abstracts, Jan. 15, 1991. Contact International Congress of Radiation Research, 1891 Preston White Dr., Reston, VA 22091, phone 703/648-3780.