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CCOPs Payline Set At 211, Winners Listed; NCI Will Fund Only 51 Unless More Funds Added

NCI has established a priority score payline of 211 in the Community Clinical Oncology Program recompetition, and will fund only 51 CCOPs this year unless more money is added to the program.three lines.

(Continued to page 2)

In Brief

Winston Ho Heads Saint Joseph Bone Marrow Transplant Unit; Smoking Costs $52 Bil. A Year

WINSTON HO, co-director of the bone marrow transplant unit at Univ. of California (Los Angeles) Medical Center for the past 12 years, became director of the bone marrow transplant program at Saint Joseph Hospital, Orange, CA, on March 1. "Orange County is fortunate he decided to locate here," said Richard Opfell, the center's director. . . . **CIGARETTE SMOKING** costs the nation $52 billion in health expenses or time lost from work, about $221 per person, per year, federal officials estimate in a new report, "Smoking and Health: A National Status Report." HHS Secretary Louis Sullivan said he will begin a campaign to ban smoking in all federal buildings, hospitals and HHS grantee institutions. Sullivan is scheduled to participate in a symposium on "Cancer Control in the American Minorities," to be held May 18 in Washington during the annual meeting of the American Society of Clinical Oncology. . . . **NIH DIRECTORSHIP** candidates list is to be submitted to the HHS Secretary by the Advisory Council on the NIH at the end of March. . . . **ROBERT MORETON,** vice president emeritus of Univ. of Texas M.D. Anderson Cancer Center, was selected for two honors, the Texas Health Foundation's Fratis L. Duff Award in recognition of his impact on public health and the Institute of Religion in Houston's commendation for humanitarian service to the Texas Medical Center. . . . **SAMUEL THIER** has been appointed to a second five-year term beginning Nov. 1 as president of the Institute of Medicine. Since Thier took office, the Institute's budget has increased from $4.7 million in 1985 to $14.4 million in 1989. . . . **NATIONAL HEART,** Lung & Blood Institute's Div. of Lung Diseases has proposed a test of the reliability of monoclonal antibodies in detecting lung cancer prior to clinical manifestation. The test would be conducted in smokers with obstructed airways enrolled in NHLBI's Lung Health Study. . . . **CORRECTION:** Phone number for information on Methods Workshops in conjunction with American Assoc. for Cancer Research annual meeting is 215/440-9300. The fax number is 215/440-9313.

CCOP Payline At 211, With Four Exceptions; Complete Lineup Listed

(Continued from page 1)

Forty seven awards will be made as the result of the competition; four CCOPs have one year remaining on awards made out of sequence from the previous recompetition.

Forty three of the 47 competing awards will be made on priority scores on or under the payline; four will be made as exceptions, with the highest at 228. The exceptions will be one year awards and will have to recompete next year, along with the four carryovers, those unfunded in this round which choose to compete again next year, and any new community groups which enter the competition then.

One applicant who scored under the payline was skipped over and will not be funded, for what reason **The Cancer Letter** was unable to learn.

The top 14 or 15 of the 43, as determined by priority score, will have the luxury of five year awards. The next one third will receive awards of four years, and the remainder, three years. From now on, competition will be held annually.

Fifty six CCOPs were funded in FY 1989. The reduction to 51 continues the slide since the program started in the early 1980s with 62.

NCI's Div. of Cancer Prevention & Control, which administers CCOP through its Community Oncology & Rehabilitation Branch, had hoped to make 60 awards this time, and the division's board of scientific counselors had approved allocation of $15 million for that purpose. However, the division came up with only $12.2 million for FY 1990, the same as for 1989.

With a level budget, and with adjustments required for the addition of cancer control to CCOP missions, reductions from recommended levels will be required to fund the 51. In general, budgets will be held to 1989 levels, with adjustments for cancer control. NCI Grants Management staff is in the process of negotiating individual awards; it seems likely that about half will receive less than in 1989, half the same and perhaps a little more.

If the additional $2.8 million can be found in the NCI budget to bring the number up to 60, nine more awards could be made from the unfunded applicants left in this round. At least that many, and probably more, are considered by DCPC staff to be strong enough to participate in the program.

A total of 72 applications were submitted in this recompetition. Seven were disapproved. The research bases (cooperative groups, centers) had been extended administratively for a year and were not involved in this recompetition. There was one new research base application, but this was not funded because it did not have enough CCOP affiliates.

List Of CCOPs Confirmed

NCI has sent letters to all applicants to inform them whether they were successful or not. The institute has not released the identities of those who will be funded; however, **The Cancer Letter** has compiled the complete list, and confirmed it:

Arizona--Greater Phoenix CCOP, David King, PI.

California--Central Los Angeles CCOP, Cary Presant, PI; Sacramento CCOP, Vincent Caggiano, PI; San Francisco CCOP, Peter Eisenberg, PI.

Delaware--Medical Center of Delaware CCOP, Wilmington, Irving Berkowitz, PI.

Florida--Mt. Sinai CCOP, Miami, Mark Wallack, PI; Florida Pediatric CCOP, Gainesville, James Talbert, PI.

Georgia--Atlanta Regional CCOP, Ernest Franklin, PI.

Illinois--Central Illinois CCOP, Springfield, Gale Katterhagen, PI; Illinois Oncology Research Assn. CCOP, Peoria, James Gerstner, PI; Carle Cancer Center CCOP, Urbana, Alan Hatfield, PI; Kellog Cancer Center CCOP, Evanston, J.D. Khandekar, PI.

Indiana--Indianapolis CCOP, Lloyd Everson, PI; Indianapolis Methodist CCOP, William Dugan, PI.

Iowa--Cedar Rapids CCOP, Martin Weisenfeld, PI; Iowa Oncology Research Assn. CCOP, Des Moines, Roscoe Morton, PI.

Kansas--Wichita CCOP, Henry Hynes, PI.

Louisiana--Ochsner CCOP, Carl Kardinal, PI.

Maine--Eastern Maine Medical Center CCOP, Bangor, Alan Boone, PI.

Michigan--Grand Rapids CCOP, James Borst, PI; Kalamazoo CCOP, Phillip Stott, PI.

Minnesota--Metropolitan Minneapolis CCOP, Patrick

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Editor: **Jerry D. Boyd**
Associate Editors:
Kirsten B. Goldberg, Patricia Williams

Editorial/Subscriptions Office
PO Box 15189, Washington, DC 20003
Tel: (202) 543-7665 Fax: (202) 543-6879

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Flynn, PI; Duluth CCOP, James Krook, PI.

Missouri--Kansas City CCOP, Robert Belt, PI; Ozark Regional CCOP, Springfield, John Goodwin, PI; St. Louis CCOP, Patrick Henry, PI.

Montana--Billings CCOP, Neel Hammond, PI.

New Jersey--Bergen-Passaic CCOP, Hackensack, Richard Rosenbluth, PI.

New York--North Shore Univ. Hospital CCOP, Vincent Vinciguerra, PI; Twin Tiers CCOP, Binghamton, NY, and Sayre, PA, Bruce Boselli, PI; Central New York CCOP, Syracuse, Santo DeFino, PI.

North Carolina--Southeast Cancer Control Consortium, Winston-Salem, Charles Spurr, PI.

Nevada--Southern Nevada Cancer Research Foundation CCOP, Las Vegas, John Ellerton, PI.

North Dakota--St. Luke's Hospitals CCOP, Fargo, Greg McCormack, PI.

Ohio--Columbus CCOP, Jerry Guy, PI; Toledo CCOP, Charles Cobau, PI; Dayton CCOP, James Ungerleider, PI.

Oklahoma--Natalie Warren Bryant CCOP, Tulsa, Alan Keller, PI.

Oregon--Columbia River CCOP, Portland, Gordon Doty, PI.

Pennsylvania--Allegheny CCOP, Pittsburgh, Reginald Pugh, PI; Geisinger Clinic CCOP, Danville, Albert Bernath, PI.

South Carolina--Spartanburg CCOP, John McCulloch, PI.

South Dakota--Sioux Falls Community Cancer Consortium CCOP, Loren Tschetter, PI.

Vermont--Green Mountain CCOP, Rutland, James Wallace, PI.

Washington--Northwest CCOP, Tacoma, Ronald Goldberg, PI; Virginia Mason CCOP, Albert Einstein, PI.

Wisconsin--Marshfield CCOP, Tarit Banerjee, PI.

The four existing CCOPs which did not participate in this recompetition were those which were funded when additional money was moved into the program last year. They were carry over applicants from the previous competition, and they will be competing for three, four, and five year awards next year. They are: Bay Area Tumor Institute CCOP, Oakland, CA, Michael Cassidy, PI; Milwaukee CCOP, Ronald Hart, PI; San Diego/Kaiser Permanente CCOP, Scott Browning, PI; and Rapid City, SD, CCOP, Larry Ebbert, PI.

CCOP has been one of NCI's most successful and popular extramural efforts, winning over all of those who doubted that community physicians and their hospitals were qualified and equipped to carry out clinical trials. The cooperative groups probably would not exist in their present form were it not for CCOPs, which contributed as much as half of the groups' patient accrual to protocol studies. They have proven that not only can they compete with their academic colleagues in the quality of their work; they frequently surpass them.

Shrinking Of Popular Program

CCOP has done just about everything it was supposed to do: make clinical research available to cancer patients in their communities; revitalize patient accrual, which had been going downhill fast as more patients chose to be treated in their communities rather than in academic centers; speed up transfer of research results into community practice.

So, if CCOPs are popular with NCI, their communities, clinical investigators, and Congress (as many congressmen have indicated), why is the program shrinking? Why are there so many large gaps between CCOPs, as can be seen in the list above? Twenty two states are without CCOPs; there is only one each in the deep South (New Orleans), and Southwest (Phoenix); and a total of one in the nation's three largest cities (Central Los Angeles).

The answer to those questions lies somewhere between the White House Office of Management & Budget and Capitol Hill, as far as the 1991 budget is concerned.

It's too late to influence OMB on the 1991 budget, but Congress is just starting to work on the appropriations bill. It would not be unreasonable to ask members, and especially the House and Senate Labor-HHS-Education Appropriations Subcommittees, to add $10 million to NCI's budget for CCOPs (in addition to other worthwhile additions for centers, cooperative groups, RO1s, construction, etc.).

Elm watch: Elm Services Inc., which has been assisting community groups with their CCOP applications since the program began, continued with its exceptional success in helping their clients get funded. In the CCOP 3 competition, 17 of 19 Elm clients will receive awards.

William Rice, Alexandria, VA, consultant, with a less ambitious lineup, had an even better batting average: one for one.

Twenty three applications in the new Minority CCOP initiative will be reviewed this month. As many as eight awards will be made, and will go to the National Cancer Advisory Board for approval in May. A total of $1.9 million has been set aside for this program, including $700,000 for the research bases.

Arizona First To Get Comprehensive Recognition Under New Guidelines

NCI Director Samuel Broder, invited to address the Sixth International Conference on the Adjuvant Therapy of Cancer, brought along a nice little gift for Conference Chairman Sydney Salmon and his colleagues at the Arizona Cancer Center: recognition of the center as an NCI designated comprehensive cancer center.

The center, which is part of the Univ. of Arizona Health Sciences Center, thus becomes the 21st NCI recognized comprehensive cancer center and the first added to that list since 1979.

Arizona is also the first to win the comprehensive designation since NCI revamped the guidelines for achieving that status.

Broder opened his talk by announcing that Arizona's request for recognition as comprehensive had been approved. Salmon, who had been the first to submit such a request under the new guidelines, was pleased but caught by surprise. "I thought that wouldn't be decided until sometime this summer," he said later.

Centers have the option of requesting comprehensive recognition through peer review, at a special meeting in August of the Cancer Center Support Grant Review Committee, or an interim designation of comprehensive by administrative review. Those that receive interim designation must seek full peer review when their core grant is up for renewal. That option will end Dec. 31, 1991.

Those which undergo peer review by the CCSGRC in August, and are found by the committee to meet the requirements, hold comprehensive status for five years as long as their core grant remains funded.

After Dec. 31, 1991, no NCI funded center may use the term "comprehensive" in its official designation unless it has received that right through one of the two processes.

It was only fitting that Arizona be the first to win recognition under the new guidelines. NCI had let the matter of recognizing comprehensive centers lie dormant through "benign neglect," leaving it up to centers to determine if they should seek comprehensive recognition rather than actively urging them to do so. That none did for about eight years was probably because few could see any advantages to the status, since it carried no financial awards from NCI. There were some disadvantages: from time to time, NCI would place new responsibilities on comprehensive centers, most of the time without coming up with the money to help the centers carry out those responsibilities.

About two and a half years ago, Salmon decided that if there were such a thing as a comprehensive cancer center, his certainly deserved recognition as such. A strong basic research program, in which Salmon participated actively himself, was complemented by a creative clinical research program and by an outstanding outreach effort headed by Frank Meyskens, who was director of prevention and control. Those were the three major requirements under the old guidelines established by the National Cancer Advisory Board in the early 1970s.

Other requirements, including appropriate facilities, were provided through Salmon's fund raising efforts which led to construction of state of the art clinical and laboratory research space. Salmon turned a $1 million NCI construction grant into a beautiful new $15 million center.

Salmon's wrote to then NCI Director Vincent DeVita asking that his center be considered for recognition as comprehensive. DeVita decided to open up the entire issue: whether or not NCI should even be in the business of designating centers as comprehensive, and if so, should the requirements be updated. After lengthy discussions with center representatives, others in the cancer research community, and NCAB members, the decision was to continue the effort, and to update the guidelines.

The new guidelines strengthened the requirements for outreach efforts, and added a requirement for participation in high priority national clinical trials. Each of the requirements was made mandatory, with recognition depending on a center's ability to meet all of them. The requirement for formal peer review was added, with a five year time limit.

Previously, recognition was for "life," or at least as long as a center kept its core grant, after an informal review by the NCAB. Even if a center lost its core grant, it had two years to get it back, and then only had to face review again by the NCAB. Regular peer review played no role in the process.

Salmon decided that if anything, his center was even more qualified under the new requirements, and immediately asked for the administrative review.

The Arizona Cancer Center has remained strong despite losing Meyskens, who left last year to become director of the Univ. of California (Irvine) Cancer Center. David Alberts, director of the Div. of Clinical Pharmacology who has become an internationally known leader in developing new treatment for ovarian cancer, was appointed director of Cancer Prevention & Control. He will keep his job as head of clinical pharmacology.

Last week, Alberts was given another job: deputy director of the cancer center. Jeffrey Trent, who had been Salmon's deputy as well as director of basic research, announced he had accepted the position of associate director for basic sciences at the Univ. of Michigan. Salmon named Alberts as his new deputy, and initiated a search for a new director of basic research.

DCE Board Approves Recompetitions Of Support Services Contracts

The Div. of Cancer Etiology Board of Scientific Counselors approved concept statements for the recompetition of several large support contracts for the division at its recent meeting.

The largest of the contracts would provide $5 million over five years for master agreements for support services in epidemiologic studies.

Following are the texts of the concept statements. All were approved unanimously.

Support services for epidemiologic studies to address emergent cancer questions. Proposed first year award $1 million, estimated total $5 million, five years, master agreements.

This concept requests continued level funding of master agreements to provide support services to enable NCI to respond rapidly to emergent cancer issues.

Leads to cancer etiology are occasionally of such public health importance as to warrant rapid evaluation. The suggestion from experimental and epidemiological investigations that the risk of bladder cancer was increased from saccharin, the epidemic of AIDS and its link to a human immunodeficiency virus, the risk of lung cancer attributable to indoor radon and the association of renal cancer and use of diuretics are examples of issues that have arisen within the past decade requiring rapid mobilization of epidemiologic resources.

The Epidemiology & Biostatistics Program is frequently called upon to respond to such emergent issues, sometimes by Congressional or executive mandate. This concept provides the program flexibility to respond in a timely manner by establishing a core of qualified contractors who can perform needed support services on relatively short notice.

Because of their emergent nature, studies to be supported under this concept cannot be specified in advance. Examples of completed and ongoing investigations which have been conducted via master agreement orders in previous years show the types of studies likely to be conducted in the renewal. They include:

--An assessment of formaldehyde exposure in various industries.

--A national case-control study of oral cancer, which confirmed smokeless tobacco as a risk factor but indicated that the rapid upswing in use in the U.S. has not as of now greatly affected oral cancer incidence.

--Cross-sectional and longitudinal surveys which provided, for the first time, baseline data on the distribution and demographic characteristics of T-cell subsets in a healthy population. Significantly higher helper/suppressor T-cell ratios were found among smokers.

--Epidemiologic investigations of AIDS, including establishing cohort studies of homosexual men in Washington and New York and hemophiliacs in Pennsylvania that demonstrated the first convincing association between HIV and AIDS, and seroprevalence surveys in Africa which revealed HIV endemic regions without AIDS, suggesting the existence of viral subtypes or differences in host response.

--Liaison, forms development and managerial support for epidemiologic studies of HTLV-1.

--Case-control study of residential exposure to radon in Missouri.

--Cohort study determining rates of incident cervical dysplasia among 25,000 cytologically normal women enrolled in a cervical cancer screening program.

--Case-control study of renal cancer and diuretics.

Since the investigations to be supported cannot be identified in advance, it is proposed that the ongoing mechanism for BSC review of individual emergent projects be continued. This mechanism calls for the Board, or a subcommittee selected by the chairman, to review a separately prepared concept statement for any study for which the total cost exceeds $500,000.

Synthesis of derivatives of polynuclear aromatic hydrocarbons. Recompetition of contracts held by Eagle Picher Industries Inc. and American Health Foundation. Proposed first year award $832,000 (two awards), total estimated $4,506,380, five years.

This concept is for recompetition of a contract to synthesize labeled and unlabeled derivatives of polynuclear aromatic hydrocarbons (PAH) to be distributed by the NCI Chemical Carcinogen Reference Standard Repository.

The Chemical Research Resources program of the Chemical & Physical Carcinogenesis Branch provides for several of the specialized needs of the chemical carcinogenesis research community. Compounds made through the efforts of this contract project have been made available through the repository since 1976. One of the contractors selected from this competition will serve as a radiorepository for labeled compounds distributed by this program.

The goal of this project is the synthesis, purification and characterization of selected derivatives, primarily oxygenated derivatives, of PAHs in gram quantities. The types of compounds include dihydrodiols, phenols, quinones, diolepoxides, epoxides, dialdehydes resulting from the cleavage of vicinally-disubstituted oxygenated derivatives, alkyl and hydroxyalkyl-substituted parent hydrocarbons, conjugated derivatives and labeled analogs. The compounds are required in carcinogenesis research as authentic standards and substrates to aid in the elucidation of the pathways of carcinogen metabolism, activation and molecular mechanism of action.

Since there are very few of the PAH metabolites available commercially, and most investigators do not have the luxury of extensive organic chemistry and analytical chemistry services at their disposal, this contract provides for a reliable and reasonably priced source of characterized standards.

Each shipment is accompanied by a request for information on the condition of the material received and nominations are solicited for additional compounds that might be of interest for the repository to carry.

The five resource contractors meet annually with the NCI project officer to review policies, safety procedures, facility innovations, synthesis problems and innovations and to prioritize the synthesis goals for the coming year. Because the program is highly interactive and flexible, necessary course corrections for interesting compounds are easily made.

In general, relatively complex multistep syntheses are required and many of the compounds and synthetic intermediates are

relatively unstable, necessitating a high level of skill and experience for the synthesis and isolation in a pure state. For these reasons and because of the hazard and expense of handling large quantities of carcinogenic compounds, it is necessary to conduct initial exploratory synthesis on a small scale, generally employing only sufficient amounts of intermediates to determine by NMR, HPLC, or other appropriate analytical techniques whether and to what extent desired reactions have taken place.

Numerous repetitions are frequently required to a) find a suitable reagent to selectively effect a desired transformation, b) develop optimum conditions with respect to temperature, solvent, stoichiometry, pH, etc., and c) devise satisfactory analytical and workup procedures for the isolation and characterization of these often unstable compounds in a pure state.

Repetition of the successful research scale synthesis on a larger scale is seldom straightforward. Several additional runs are generally required to solve the remaining problems involving maximization of yield at each step and purification of molecules susceptible to relatively facile decomposition. Since the majority of the compounds synthesized cannot be recrystallized or chromatographed by conventional methods without substantial decomposition, the most generally applicable and powerful technique for purification has proven to be preparative high pressure liquid chromatography.

It is expected that the successful contractor will carry out the same highly productive, responsive and innovative synthesis work that in the past has resulted in the availability of a continuous supply of metabolites and analogs of parent hydrocarbons.

Characterization of unlabeled compounds will be shipped to the repository according to shipping protocols established by the project officer. Distribution will be handled by the repository contractor for all unlabeled compounds and will be on a pay back system. Labeled compounds will be subdivided and shipped on a pay back system to investigators directly by one of these synthesis contractors as instructed by the project officer.

Transplacental carcinogenesis and tumor promotion in Old World monkeys. Recompetition of a contract held by SEMA Inc. Proposed first year award $500,000, proposed total $2.5 million, five years.

The objectives of the proposed continuation of this program, originally begun in 1974, are to utilize the experience and insights gained from previous studies with model carcinogens to investigate environmental substances that are highly relevant to humans. Arylamine carcinogens of dietary origin are of highest priority. Future work will focus mostly on the patas monkey and the macaques, which at present comprise a third of the total primate population in the colony, will be reduced.

The ongoing carcinogenesis studies in both species will be completed without undertaking any new long term tumorigenesis investigation. While preserving the uniquely valuable patas colony for passible future bioassays of suspect human transplacental carcinogens, continuing studies will utilize the patas monkey as a manipulable surrogate for human fetal tissues and will focus on: 1) quantification by postlabeling of carcinogen-DNA adducts in fetal tissues and placenta as a function of stage of gestation at which exposure is sustained and as modified by concurrent exposure of the mother to metabolism inducing agents or inhibitors of hepatic detoxification, such as ethanol, 2) extending studies on the inducibility and selective inhibition of specific forms of P450 by environmental substances.

The animals in this project belong to a closed, self perpetuating breeding colony and will be maintained as such for the future. For transplacental exposures, timed pregnancies are confirmed by physical examination of pregnant females and dosed singly or repeatedly with the agent of interest. While intravenous administration was originally used to study the biology of transplacental carcinogenesis, agents of current interest are given in solution in oil or aqueous media by gavage under sedation.

All experimental protocols are initiated by Laboratory of Comparative Carcinogenesis investigators and reviewed and approved independently by both the DCE Animal Care and Use Subcommittee and the contractor's Animal Care and Use Committee for compliance with existing rules and guidelines for animal experimentation.

Animals are bred, housed and dosed with test chemicals by the contractor under protocols provided by NCI investigators. Surgical procedures including cesarean sections are performed by the contractor's principal investigator, who is a veterinary surgeon. Necropsies, pathology and all biochemical procedures on tissues or other specimens are carried out by NCI personnel.

The incumbent contractor has pioneered development of environmental enrichment for caged nonhuman primates and evidence of active contributions to this evolving methodology will be a requirement of the recompeted contract. AAALAC accreditation of the animal facility also will be required.

Laboratory rodent and rabbit facility as a resource to the Laboratory of Cellular Carcinogenesis & Tumor Promotion. Recompetition of a contract held by Biocon Inc. Proposed first year award $450,000, estimated total $1,910,909, four years.

The function of this contract is to provide space, care and technical support for the conduct of in vivo experiments. The contractor shall 1) provide proper housing and husbandry for the maintenance of healthy intact, nude and transgenic mice, vitamin-deficient hamsters and mice and normal rabbits, 2) monitor animal health through periodic testing for pathogenic viruses, bacteria and parasites, 3) provide a hazard free environment to safely conduct skin carcinogenesis experiments using cancer initiating and cancer promoting chemicals, 4) maintain a barrier environment for nude mice to be used for homograft and xenograft experiments and tumorigenicity testing of a variety of types of cultured cells by injection or implantation, 5) prepare diets for vitamin deficiency studies and monitor animal weights and other clinical signs of deficiency states, 6) conduct skin carcinogenesis experiments, including application of chemicals, counting of tumors and autopsies, 7) perform skin grafts on nude mice, 8) inoculate rabbits and other species with antigens provided by NCI, bleed inoculated animals and collect antiserum, 9) collect and preserve tissues by freezing or fixation.

The resources provided by this contract make it possible for LCCTP to conduct an integrated in vivo-in vitro research program designed to study mechanisms of cancer initiation and promotion, susceptibility determinants for chemical carcinogenesis, mechanisms of anticarcinogenesis by vitamins and other agents, and the interaction of carcinogens and cancer chemotherapeutic agents with DNA as determined by immunological probes.

Under the proposed new contract, the laboratory will continue to pursue skin carcinogenesis studies on 1) the mechanism of conversion from benign to malignant lesions, 2) the characterization of subpopulations of papillomas, 3) the testing as inhibitors of carcinogenesis of agents identified as modulators of keratinocyte physiology in cell culture, 4) the genetic basis for sensitivity, and 5) environmental agents which may be active as promotors or converting agents.

As a new aspect of the proposed contract, transgenic mice will be bred and maintained. Antibodies will continue to be made in rabbits to DNA adducts resulting from interaction of carcinogens or chemotherapeutic agents with DNA and to unique polypeptides of proteins associated with epidermal differentiation. Additionally, antibodies will be prepared to protein kinase C

isoaymes and to the retinoid receptors. The use of the grafting system to determine the in vivo phenotype of cultured keratinocytes will be expanded. The interactions of normal and initiated epidermal cells, and the effect of the introduction of specific oncogenes or growth factor genes, in the graft system are of particular interest.

The laboratory wishes to contract for the care of the following number of animals: 3,700 conventional mice, 300 transgenic mice, 1,000 nude mice, 20 guinea pigs, 50 rabbits, 200 rats, 200 hamsters. These numbers represent an increase of 700 conventional mice, 300 transgenic mice and 250 nude mice over the current contract. This expansion will require an increase in technical and animal care personnel from the current six individuals to eight.

Survey of compounds which have been tested for carcinogenic activity: 1991-1994. Recompetition of a contract held by Technical Resources Inc. Proposed first year award $198,358, estimated total $843,000, four years. This is a small business set-aside.

NCI has published the "Survey of Compounds Which Have Been Tested for Carcinogenic Activity," commonly referred to as PHS-149, since 1951. There are 14 published volumes, covering the years 1939 through 1986, and a cumulative index for all these years. The 1987-88 volume is being printed by the Government Printing Office and the present contractor is working on the compilation of the 1989-90 volume and a new cumulative index.

Over the years the size of these volumes has grown from 1,043 pages containing data on 574 chemicals and 646 citations in the 1974-75 volume to 1,802 pages covering 747 chemicals and 798 citations in the 1987-88 volume. The latest cumulative index contains 4,623 CAS registry numbers covering over 20,000 chemical names and synonyms. To compile each one of these volumes, an average of 625 journals, covering the world literature, as well as all pertinent computerized data bases such as CHEMLINE, TOXLINE, etc., were screened.

The objective of this procurement is to continue the survey for the years 1991-94. The responses to a user survey, conducted a few years ago and the numerous unsolicited responses received from users of this document since that time confirm that the survey still serves as a valuable resource not only to federal and state health and regulatory agencies but also to investigators engaged in chemical carcinogenesis research. In addition to domestic distribution, copies are distributed to users in over 25 foreign countries, whose responses have been even more enthusiastic in favor of continuing this effort.

The contractor will continue the screening of applicable computerized data bases and pertinent journals; relevant data will be extracted, edited and formatted according to the established headings prescribed for this publication. Camera-ready copies and tapes or floppy disks will be delivered to NCI. The concept statement covers two volumes over a four year period, plus a new cumulative index.

As in the past, the documents will be published by the GPO. NCI will continue to make distribution to federal and state agencies, academia and interested researchers both in the U.S. and overseas, and the Superintendent of Documents will be asked to put PHS-149 on sale for the public.

New Publications

Following are new titles from Cold Spring Harbor Laboratory Press. Contact Cold Spring Harbor Laboratory, Fulfillment Dept., Box 100 IR, Cold Spring Harbor, NY 11724, phone 1-800/843-4388. In New York, phone 516/367-8423:

"Proceedings of the 1989 Symposium on Immunological Recognition," edited by F.M. Burnet, N.K. Jerne and G.M. Edelman. Cloth, $200, paper $95.

"Molecular Biology of Signal Transduction," proceedings of the 1988 symposium. Cloth $180, paper $95.

"Molecular Cloning: A Laboratory Manual," by J. Sambrook, E.F. Fritsch and T. Maniatis. $115.

"Viral Proteinases as Targets for Chemotherapy," edited by Hans-Gerog Krausslich, Stephen Oroszlan, Eckard Wimmer. $24.

"Cytoskeletal Proteins in Tumor Diagnosis," edited by Mary Osborn and Klaus Weber. $24.

"Recessive Oncogenes and Tumor Suppression," edited by Webster Cavenee, Nicholas Hastie, Eric Stanbridge. $24.

"Oncogenes and the Molecular Origins of Cancer," edited by Robert Weinberg. Cloth $97, paper $55.

"Molecular Diagnostics of Human Cancer," edited by Mark Furth and Melvyn Greaves. $95.

Titles available from other publishers:

"Annals of Oncology," official journal of the European Society for Medical Oncology, published bimonthly in 1990, monthly in 1991. Volume 1 (six issues), $133.25. Price for members of American Society of Clinical Oncology and Japanese Society of Medical Oncology $85.70.

USA and Canada, contact Kluwer Academic Publishers, PO Box 358, Accord Station, Hingham, MA 02018-0358. In Japan, contact Maruzen Co. Ltd., Subscription Dept., PO Box 5050, Tokyo Int. 100-31. Elsewhere, Kluwer Academic Publishers, PO Box 322, 3300 AH Dordrecht, The Netherlands. Authors are invited to submit papers to the Editorial Office, Via Soldino 22, CH 6903 Lugano, Switzerland.

"Human Antibodies and Hybridomas," a new journal to bring together all aspects of human hybridomas and antibody technology under a single theme. First issue to appear in April. Manuscripts should be send to Editor in Chief, Dr. Mark Glassy, Biotechnetics, 4116 Sorrento Valley Blvd., San Diego, CA 92121, phone 619/455-7260. For more information contact Glassy or the publisher, Butterworths, 80 Montvale Ave., Stoneham, MA 02180.

"Cancer Treatments: Consider the Possibilities," pamphlet for patients and "What Are Clinical Trials All About?" booklet for patients to accompany patient counseling, prepared by NCI. Available free by calling Cancer Information Service, 1-800-4-CANCER, or by writing to Office of Cancer Communications, NCI, Bldg 31 Rm 10A-24, Bethesda, MD 20892.

"A Time to Live," by Dorothy Romero, illustrated by Noriaki Ida. A collection of 63 poems about the author's son's battle with leukemia. Available for $9.95 from the M.D. Anderson Div. of Pediatrics, 713/792-6021.

"Blood Cell Growth Factors: Their Biology and Clinical Applications," edited by Martin Murphy and Vittorio Rizzoli. A 416 page supplement to the "International Journal of Cell Cloning," contains proceedings of the Second International Capri Conference. $60, Alphamed Press, 4100 South Kettering Blvd., Dayton, OH 45439-2092.

"Single Donor Platelets: A Roundtable Discussion," outcome of a roundtable discussion. Free from the Component Therapy Information Bureau, PO Box 620, Deerfield, IL 60015, phone 708/940-6400.

"Cancer Imaging with Radiolabeled Antibodies," by David Goldenberg. Available in May, $160, from Kluwer Academic Publishers, Order Dept. M, PO Box 358, Accord Station, Hingham, MA 02018-0358.

New titles available from Raven Press, 1185 Ave. of the Americas, New York, NY 10036, phone 212/930-9500:

"Second International Congress on Cancer Pain," edited by Kathleen Foley, John Bonica and Vittorio Ventafridda. Associate editor Mary Callaway. $110.

"Interstitial Brachytherapy: Physical, Biological and Clinical Considerations," by the Interstitial Collaborative Working Group.

This volume is the result of a three year collaborative effort sponsored by NCI, by a group of radiation oncologists and medical physicists from three medical centers. $98.

RFPs Available

Requests for proposals described here pertain to contracts planned for award by the National Cancer Institute unless otherwise noted. NCI listings will show the phone number of the Contracting Officer or Contract Specialist who will respond to questions. Address requests for NCI RFPs, citing the RFP number, to the individual named, the Executive Plaza South room number shown, National Cancer Institute, Bethesda MD 20892. Proposals may be hand delivered to the Executive Plaza South Building, 6130 Executive Blvd., Rockville MD. RFP announcements from other agencies will include the complete mailing address at the end of each.

RFP NCI-CO-03882
Title: Booklet printing
Deadline: May 2

Single award for a fixed price contract for delivery 45 days after award of contract. Production area, assumed 125 mile radius of zero milestone, Columbia, MD. Bidders outside area must furnish documentation of their ability to meet schedule. Inspection of source materials will be April 16-17, 8 a.m.-5 p.m. at NIH Bldg. 31 Rm 10A30, 9000 Rockville Pike, Bethesda, MD. For an appointment contact Erin Lange one week prior to source review. Booklet. 400,000 copies of 24 pages with separate wraparound cover. Printed with 2 PMS inks, cover and text, plus matte varnish on cover. Operations include saddle stitch, trim, printing, folding, negatives, packaging, mailing and f.o.b. destination to Columbia, MD. Contractor furnish paper. Quality attributes level II for printing and finishing. Bid request on Standard Form 26. Phone, telegraph, fax request not acceptable.

Contract Specialist: Erin Lange
RCB Executive Plaza South Rm 608B
301/496-8628

RFP NCI-CO-03879
Title: Booklet printing
Deadline: May 2

Single award for a fixed price contract for delivery 60 days after award of contract. Production area, assumed 125 mile radius of zero milestone, Washington, D.C. Bidders outside area must furnish documentation of their ability to meet schedule. Inspection of source materials will be from April 12-13, 8 a.m.-5 p.m. at NIH Bldg. 31, Rm 10A30. For appointment contact Erin Lange one week prior to source review. Booklet. 202,700 copies of 12 pages with separate wraparound cover. Printed in four-color process and black ink or additional color ink. Operations include saddle stitch, trim, printing, folding, negatives, packaging, mailing and f.o.b. destination to Columbia, MD. Contractor furnish paper. Quality attributes level 1 for printing and level 2 for finishing. Bid request on Standard Form 1447. Phone, telegraph, fax request not acceptable.

Contract Specialist: Erin Lange
RCB Executive Plaza South Rm 608B
301/496-8628

NCI Contract Awards

Title: Biomedical computing--design & implementation (Environmental Epidemiology Branch)
Contractor: Capital Systems Group Inc., Rockville, MD; $249,993.

Title: Detailed drug evaluation and development of treatment strategies for chemotherapeutic agents
Contractor: Southern Research Institute, Birmingham, AL; $4,248,144.

Title: Tracing individuals for environmental epidemiologic studies on cancer (method 2)
Contractor: Policy Management Systems Corp., Blythewood, SC; amount not available.

Title: Study of precancerious gastric lesions in relation to stomach cancer in China
Contractor: Beijing Institute for Cancer Research, Beijing, China; $275,529.

Title: Support services for epidemiologic studies to address emergent cancer issues
Contractor: Illinois Cancer Council, Louisiana State Univ., Schulman, Ronca & Bucuvalas Inc., Southwest Research Institute; $0.