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DCT MOVES FAST TO TAKE CONTROL OF COOPERATIVE GROUPS, GET MULTIMODALITY STUDIES UNDER WAY

NCI's Div. of Cancer Treatment has wasted no time in carrying out its intention to move the Cooperative Group Program out of its traditional drug-testing role and into major emphasis on clinical research in multimodality treatment of early disease.

The Cancer Clinical Investigation Review Committee, meeting last week for the first time as a DCT advisory body overseeing the cooperative groups, called for group chairmen to submit immediately proposals for planning grant supplements to get the change in direction under way.

That action by CCIRC culminated a week in which DCT Director Vincent DeVita and his deputy, Stephen Carter, smoothly but firmly asserted control over the Cooperative Group Program. At their sug-

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In Brief

CARBONE TO LEAVE NCI FOR WISCONSIN; ACS' HOLLEB SAYS TOBACCO INDUSTRY TRIES TO HIDE AD WARNING

PAUL CARBONE, 17-year NCI staff member and chairman of the Breast Cancer Task Force Treatment Committee, will leave the government next year to become associate director and professor of medicine and human oncology at the Univ. of Wisconsin Comprehensive Cancer Center. . . . **SATEVE POST**, October issue, in article about vitamin C, comments that vitamin C discoverer Albert Szent-Gyorgyi died in 1973 at the age of 90. Szent-Gyorgyi, who is working on his "electronic theory of cancer" in his Woods Hole, Mass., lab, reportedly was more upset by the Post's addition of nine years to his age than by the premature obit. . . . **ADD TO OCTOBER** meetings of NCI advisory groups: Drug Development Contract Review Committee, Oct. 10, Blair Bldg Room 414, open 9-9:15 a.m.; Committee on Cancer Immunotherapy, Oct. 23, Bldg 10 Room 4B14, open 1-1:30 p.m.; Combined Modality Committee, Oct. 30, Bldg 31 Room 3A47, open 9:30-10 a.m. Cancel Virus Cancer Program Scientific Review Committee A, scheduled for Oct. 6. . . . **FRANK RAUSCHER** has been named "scientist of the year" by the Achievement Rewards for College Scientists Foundation. . . . **DAVID JOHNS**, who has headed the Div. of Cancer Treatment's Drug Metabolism Section, has been named chief of the new Laboratory of Medicinal Chemistry & Biology in DCT. . . . **MAXINE SINGER**, head of the Nucleic Acid Enzymology Section of the Div. of Cancer Biology & Diagnosis, is the third woman to serve as trustee of Yale Univ. in the 274-year history of that institution. . . . **ARTHUR HOLLEB**, ACS senior vice president for medical affairs and research, has charged the tobacco industry with deliberately designing cigarette ads to play down or obscure the warning required by law that cigarette smoking is dangerous to health.

CCIRC, CHAIRMEN—ASSURED OF MORE MONEY—WELCOME CHANGE OF DIRECTION

(Continued from page 1)

gestion, the group chairmen organized themselves into a separate advisory group and agreed to establish a series of disease-oriented subcommittees which will map out the new multidisciplinary studies (***The Cancer Letter,*** Sept. 26).

The group chairmen and CCIRC accepted their new roles (which include some new limitations) and plunged enthusiastically into the program which will bring surgeons, radiotherapists and immunotherapists into the groups in greater numbers and with a much greater degree of involvement in planning and directing the new studies.

One reason for the enthusiasm was the promise by DeVita and Carter of increased funding for the groups. CCIRC Chairman Giulio D'Angio, Sloan-Kettering, pointed out that "the mechanism has been there for at least three years to fund radiotherapists and surgeons" in the groups but no grant applications or protocols to involve them have been submitted because no money was avilable to fund the necessary planning."

CCIRC member Theodore Grage, Univ. of Minnesota, commented, "It's a Catch-22 situation that we've got to get out of."

Carter suggested that group chairmen be encouraged "to come in now with supplemental grant applications. We'll give it peer review without the Catch-22 thing. . . . CCIRC can approve all proposals that are feasible and good, and let NCI staff worry about the money."

Raul Mercado, head of DCT's Clinical Investigations Branch, suggested that it might be premature for some groups to undertake that effort now.

"That will fall out in the review," Carter said. "We could weed them out then."

Carter suggested that planning supplement applications be submitted by the Feb. 1 deadline for the spring review cycle.

Earlier, Carter described factors he said should be the basis for a combined modality strategy involving a particular tumor:

1. There must be some active chemotherapeutic agent for disseminated disease, one that gives a meaningful response rate with a "tremendous" degree of tumor cell kill.

2. It should be used immediately after surgery and/or radiation to eradicate microscopic tumor cells.

3. "We should ask what single agents or combinations are available for testing in adjuvant situations."

Carter said studies are needed for nearly every tumor type. Responding to a question from CCIRC member Carol Newton, UCLA, on what are the current "hot" tumors "where we need to move fast" with adjuvant studies, Carter mentioned ovarian cancer as one that "is particularly exciting and which has not been studied in an adjuvant situation." Head and neck cancer also has potential for followup drug therapy after local treatment, he said.

The three-day CCIRC meeting included discussions on performance evaluation of the groups and improving protocol reviews.

Montague Lane, Baylor, headed the subcommittee which drew up a report on performance evaluation which the committee accepted. It follows:

"Many of the subjects we have addressed are procedural or policy matters. They relate to the activities of this committee (how, when and why to do site visits, merit reviews, protocol reviews), the relationship of CCIRC to other NCI programs and activities, mechanisms of funding, data retrieval and publication, etc. The most critical issue, nevertheless, is performance—what has been accomplished—what is the yield and at what cost.

"Determinations must be made of the performance of a total group effort and of individual institutions and the considerations for each are somewhat different.

"With respect to the group as a whole, the key question is scientific productivity. The group chairmen, headquarters, statistical office, constitution, conduct of meetings, quality of the members, etc. are some of the many determinants of group performance—and their evaluation may lead to an understanding of the basis for more or less successful performance—and will not be discussed further.

"Evaluation of scientific productivity implies comparison in some manner perhaps with the productivity of other groups, with contract research, or with individual investigator efforts. These judgments, of course are all highly subjective. The term scientific productivity as used here embodies the following concepts:

"1. The science must be of high quality. Implicit in 'high quality' are—

"a. Well designed, original ('unique', 'innovative') protocols.

"b. The protocol should address relevant and important questions (subjective).

"c. The study should be properly conducted with respect to case evaluability, repetity of data acquisition, and quality of data reported.

"d. Thorough and rapid interim and final data analysis with utilization of the data by the group for further study design.

"2. The results of the study should be published promptly.

"3. Completed study should advance on the knowledge of cancer in various spheres, but particularly in therapeutics.

"4. The study should be carried out as expeditiously as possible so that significant questions can be asked and answered as rapidly as feasible.

"5. There should be cohesive transition from one study to the next in a disease area, i.e., protocols

should be waiting in the wings to ask the next question as results of a study become evident.

"6. Advances in the state of the art should be incorporated into new studies and ongoing studies should be modified or terminated when appropriate. There should be evidence that investigators in the group with special knowledge and resources are contributing actively to the design and conduct of studies. In multimodality studies particularly, but not exclusively, there should be adequate input from the appropriate individuals and committees.

"7. There should be evidence that the group is aware of other existing and planned efforts to avoid unnecessary duplication or overlap.

"8. The institutions within the group should have strong commitments to the scientific efforts of the group as evidenced by participation and protocol design, responsibility for studies, bringing of unique resources or talents to the group.

"9. The group should not be wasteful in its efforts, i.e., continuing studies that require termination, mounting studies that cannot answer the question posed, posing trivial questions as the basis for major studies, conducting studies for which they lack patient material, expertise or both, etc. Cost factors should be considered and this is a comparative type of consideration as well. There should be evidence that the resources of the group are being used efficiently, properly, and economically.

SURVEILLANCE

"Within the group. The group should have an active, regular, specified mechanism for evaluating the performance of individual member institutions and for taking remedial actions when deficiencies are noted, i.e. warning status, dismissal, etc. Items to be considered in such performance review should include:

"1. Participation in the scientific activities of the group (committee activities, generation of ideas, protocol development, preparation and critique, chairing studies, writing committees, attendance at meetings).

"2. Case accrual, particularly in areas of commitment to studies.

"3. Promptness of submission of reports.

"4. Eligibility of patients for study.

"5. Quality of reports (accuracy, legibility, adherence to protocol, completeness).

"6. Response to inquiries for information on specific patients.

"7. Case evaluability.

"8. Preparation of abstracts and publications.

"Surveillance by the CCIRC. The above parameters would also be appropriate for evaluation of group and institutional performance by the CCIRC. In addition, there should be an analysis to indicate whether there is comparability of results within institutions within the group with respect for example to toxicity or therapeutic activity.

"The other type of surveillance that should be conducted is evaluation of the results of protocols carried forward by groups in which there were major differences between staff, CCIRC, or outside reviewers and the group that were not resolved. The correctnesss of incorrectness of the group's view should be determined with feedback to the group and to the CCIRC.

"Finally, individual institutions and groups should be made aware of evaluations made by the CCIRC of their specific performance."

SENATE VOTES DOWN ATTEMPT TO SLASH $100 MILLION FROM CANCER PROGRAM

The effort to strip the extra money for NCI approved by the Senate Appropriations Committee from the bill when it reached the Senate floor surfaced after all, and in a more drastic form than previously reported (***The Cancer Letter,*** Sept. 26). Fortunately for the cancer program it was resoundingly defeated, and the bill went to conference with the House carrying $803 million for NCI (with an expected $22 million for training programs to come later).

The Senate bill has exactly $100 million more for NCI than the bill passed by the House. If conferees follow precedent, they'll split the difference

An unlikely combination of liberals and conservatives, headed by Democrats Alan Cranston (Calif.) and Gaylord Nelson (Wisc.), took part in the effort to strip $100 million from NCI's appropriation and to take the extra $50 million the committee had given the National Heart & Lung Institute and redistribute it among the other NIH institutes (except NCI).

Cranston said his amendment was an effort to "restore some balance to appropriations for the various activities of NIH; to stimulate a focus on the need to achieve qualitative and constructive changes in the research emphasis of NIH toward support of basic research; to give the Cancer and Heart & Lung institutes a period to consolidate their programs and assess and reasses, in terms of short and long range goals, their progress and directions in using the tremendous amounts of funds they have been receiving over the past several years; . . . and to reduce the overall amount in the bill by $100 million."

Cranston claimed that since 1970, NCI has received an increase of 186% and NHLI 52% in "constant" dollars—adjusted to the consumer price index—while the rest of NIH has a minus 13% during the same time. He said the amendment would permit all of NIH to fund 60% of approved new grants instead of 82% and 85% respectively for NCI and NHLI and 50% for the rest of NIH. Cranston also had letters from former NIH directors James Shannon and Robert Marston supporting him.

HEW's new secretary, David Mathews, expressing for the first time an opinion with a bearing on the cancer program, strongly supported the amendment in a letter Cranston placed in the record.

Chairman Warren Magnuson (D-Wash.) of the HEW Appropriations Subcommittee led the fight against the amendment. "I could get 500 doctors for each one the senator (Cranston) could get who would talk the other way in support of cancer and heart programs," Magnuson said. He chided Cranston for not appearing before his subcommittee when it was considering the bill to ask for more money for the other institutes, and said he would look favorably on any request for additional funds for them in a supplemental bill.

Magnuson insisted that NIH is funding more basic research than it ever has, and that the ratio of basic to applied research at NCI is within a few percentage points of where it has always been.

Magnuson was supported by Sen. Richard Schweiker (R-Pa.), who asked, "Are we saying the war on cancer is over? Are we saying that we won it? Or are we going to say we surrender?"

Sen. Edward Kennedy (D-Mass.) pointed out that cancer and heart get more money than other disease categories because they will afflict from one half to two thirds of all Americans. "None of us expect easy victories in this area, but we are committed to win this battle ultimately," Kennedy said.

Sen. Hubert Humphrey (D-Minn.) took exception to the Cranston-Nelson contention that NCI cannot effectively use all the money approved by the committee. He also disagreed with Sen. Edmund Muskie's (D-Maine) support of the amendment because, Muskie said, it was needed to help keep total appropriations under the limit approved by the Senate budget resolution. Humphrey insisted the NCI appropriation "is within the concurrent budget resolution target level."

Republican Senators Edward Brooke (Mass.), ranking GOP member of Magnuson's subcommittee; Robert Dole (Kan.) and Jacob Javits (N.Y.) also spoke against the amendment.

The amendment was defeated, 62-19, and the Senate then voted for the bill, 60-18.

FINAL REGULATIONS FOR CLINICAL CANCER EDUCATION PROGRAMS ADOPTED

Regulations to implement NCI's new Clinical Cancer Education Program were published Sept. 29 in the *Federal Register.* The program is designed to stimulate development of innovative teaching methods in cancer prevention, diagnosis, treatment and rehabilitation.

Proposed regulations appeared in the *Federal Register* last March 24, to allow public comment. The final regulations are substantially unchanged from those proposed.

NCI grants to fund undergraduate and graduate cancer education activities over and above existing curricula will be available for schools of medicine, dentistry, osteopathy, public health, and affiliated teaching hospitals and cancer institutions in the 50 states, the District of Columbia, and American commonwealth and trust territories. Only nonprofit institutions are eligible.

"Education of physicians and dentists in the management of cancer is an important part of the National Cancer Program," said NCI Director Frank Rauscher. "It is essential to improve instruction in cancer-related subjects at both graduate and undergraduate levels. The new education program will coordinate activities of faculty from many departments to provide carefully designed, multidisciplinary cancer instruction."

The program will enable schools of health sciences to include additional instruction in topics on cancer. Medical curricula may include special techniques for cancer diagnosis and treatment, cancer epidemiology and biostatistics, clinical cancer research, community clinic work, and organization of cancer seminars.

Dental schools can include either additional courses or increased curricular emphasis on such topics as oral diagnosis, pathology, surgery, prosthetics, as they relate to cancer. Students will be encouraged to participate in oral cancer screening projects in the community.

NEW CREG ANNOUNCEMENTS MADE BY NCI, IN TREATMENT, ETIOLOGY, EPIDEMIOLOGY

Four new Cancer Research Emphasis Grant announcements have been released by NCI, two by the Div. of Cancer Treatment and two by the Div. of Cancer Cause & Prevention.

Title: *Non-thermal effects of microwaves on living tissue – No. DCT - 2*

Microwave absorption spectra are to be measured on one or more of the following classes of tissues: representative normal and malignant tissues, normal and transformed cell lines, and a variety of standard tumor strains in tissue culture where comparable normal strains are available.

These spectra will be determined with sufficient resolution and over sufficiently wide frequency intervals to permit correlation with previously established normal and tumor absorption progressions. Experimental conditions must be such that no appreciable sample temperature elevation occurs. Examination of measured samples by standard cytological techniques will be performed to the degree necessary to confirm identity and integrity. Thorough consideration should be given to the perfusion, nutrition, and mitotic state of tissues during measurements.

Examination of the influence of microwave absorption upon vibrational and rotational modes is to be performed by simultaneous observation of these modes by other physical probes.

Tentative attribution of observed microscopic effects will be made to possible events on an organizational, organelle, molecular, or transport level. This study of mechanisms of interaction is to be made in an effort to present observed effects in a meaning-

ful context and to provide guidance in seeking correlative observations. Consideration may be given to measurement of progressive spectral changes accompanying tissue treatment with known carcinogens or antineoplastic agents.

This research knowledge is sought to assist in the exploration of non-traditional modalities of cancer treatment. Specific goals which may be supported are:

(1) The development of sensitive means to discriminate and identify tumor cells in normal host tissues.

(2) The discovery of differential tumor/host effects to be exploited alone or as a means of potentiating other modes of treatment.

(3) To further understanding of the basic mechanisms of tumorgenesis.

(4) To provide a data base of organized quantitative parameters of malignancy to facilitate subsequent investigations.

For further information, contact Vincent Oliverio, 301-496-4386, DCT, NCI.

Title: *Experimental combined modality (radiotherapy–chemotherapy) studies (ECMRC) – No. DCT - 3*

The Div. of Cancer Treatment, NCI, desires to support research studies on the preclinical evaluation of combinations involving chemotherapy and radiotherapy. Systems to be used may be in vitro or in vivo or a combination thereof. The purpose of these studies will be either to uncover a potentially positive interaction between radiotherapy and drugs drawn from a selected group of antitumor agents or to elucidate how single drugs and radiotherapy might interact optimally with the goal of aiding investigators who might be attempting to combine them clinically.

DCT currently has investigational studies of some type in progress with over 100 anticancer drugs, all of which either have proven or potential clinical anticancer activity. It is desired to investigate these drugs in some manner in combination with radiation to uncover a potential positive interaction with the latter modality. Drugs exhibiting this potential will be considered for further more detailed, preclinical investigation to confirm the positive interaction. Ultimately, they will be considered for clinical evaluation with x-ray in an attempt to validate the predictions of the experimental model.

There are several drugs with proven cytotoxic activity against a wide range of radioresponsive tumors. Examples of such drugs are cytoxan, adriamycin, methotrexate, and 5-FU. These already have been tested to some extent with radiotherapy, without positive results. Recognozing the manifold variables of schedule, sequence, and ratio there are at least 300 ways a single drug could be combined with radiotherapy in the treatment of any individual tumor type. Given the massive number of possible therapeutic combinations, it is clear that only a tiny fraction can be actually evaluated in patients. It is therefore desirable to develop new systems and refine existing ones that might aid the clinician in selecting a potentially optimum sequence, schedule, and ratio of drugs and x-ray.

The grantee will describe in depth his experimental approach to the problem of combining drugs and x-ray and give explicit details about the systems to be used.

As an example, one of the approaches may be in vitro testing with cultured mammalian cells which could permit the assessment of the following drug-radiation properties: (a) the age-response function of a drug in respect to that of radiation, (b) the effect on cell cycle progression of a radiation and/or a drug exposure, and (c) the presence or absence of damage interaction due to radiation and a drug. With the foregoing in mind, an in vitro testing system could be structured as follows:

Asynchronous cells Three states of asynchronous populations could be considered: (a) log phase, (b) plateau or stationary phase, and (c) spheroidal growth.

Synchronous cells Here, the principal approach would be to delineate cell-cycle dependencies or age-response functions. The same combinations of treatment proposed for asynchronous cells should be pursued with the main modification being emphasis on single or combined doses followed through the cycle.

Intracellular modes of action Studies at this level of inquiry would be less predictable, but no less important when required, than those preceding. To explain qualitative and perhaps quantitative differences among cell lines, the possible areas of inquiry include drug transport, effects on macromolecular synthetic pathways, the stimulation or inhibition of enzymatic activity, and damage/repair observations involving nucleic acids.

If an in vivo system is to be used it should be described in detail, including its origin, development, reproducibility, kinetics, and response to therapies evaluated to date. For each normal or tumor system a quantitative end point should be reported. Examples of such end points are TCD_{50} estimates for single and multifraction doses, survival of normal or malignant clonogenic cells assayed in vivo and in vitro, regression-regrowth curves, survival rates and/or times, etc. When possible a differential between normal and neoplastic tissue response should be determined. Correlation of in vivo and in vitro responses would also be advantageous.

Studies should be directed at obtaining an understanding of how the two modalities (drug + x-ray) are combining. Studies can also be made of the time, degree, and dose dependence of recruitment of non-cycling cells by radiation to help in the determination of optimal times for the administration of cycle-active

chemotherapeutic agents. These studies should be undertaken with appropriate tumor systems and with selected normal cells.

For further information, contact Vincent Oliverio, 301-496-4386, DCT, NCI.

Title: *Etiology of cancer in special populations – No. DCCP - 14*

The Div. of Cancer Cause & Prevention desires to expand the search for new leads on the etiology of cancer through studies of well-defined populations thought to be at high or low risk for cancers of specific sites. Examples of populations of interest include ethnic, religious, and occupational groups such as American Indians, Polynesians, Mormons, Seventh-Day Adventists, farmers and industrial workers exposed to chemical and physical agents which may also affect the general population. Proposals should include a description of the defined population, and should indicate the advantages of the specific observational setting.

The investigator should present evidence of capabilities and requirements for further defining, monitoring, and studying such populations for disease experience, related factors, etc. The ability to design and carry out analytical epidemiologic studies, either retrospective or prospective, involving collection of data over and above the normal cancer registry routine is essential. Investigators will be encouraged to collect specimens and observations for use in collaboration with other investigators.

For further information, contact James Murray, 301-496-3116, DCC&P, NCI.

Title: *Pathology and epidemiology of specific cancer sites – No. DCCP - 15*

NCI is accepting applications for support of research projects that represent a coordinated multidisciplinary (epidemiology-pathology) approach to the study of site-histology complexes of tumors and other methods that may identify subsets of tumors with different etiologies. Epidemiology and pathology studies indicate that tumors of individual anatomical sites may represent a mixture of two or more types and etiologies. Preferences will be given to work on specific sites not included in ongoing NCI site-oriented task force programs. NCI currently has task forces on breast, lung, bladder, prostate, pancreas, and large bowel cancer.

Proposals from groups with multi-disciplinary capabilities in geographic pathology, epidemiology, biostatistics, experimental carcinogenesis, etc., with an orientation to specific sites are desired. The capability of developing and integrating sophisticated pathology studies (development and testing of new type criterion, organ bank studies of precursor lesions, etc.) within existing epidemiology resources (for example, the SEER program of cancer Surveillance, Epidemiology and End Results reporting supported by NCI) to expand the current range of descriptive and analytical epidemiology studies for specific sites is desirable.

Capability for integrating developments in epidemiology and animal experimentation, and developing etiologic hypotheses that can be tested by epidemiologic observations and/or laboratory work are desired. Long-term support is contemplated and proposals should develop a study rationale for a sequence of activities over a period of up to five years.

For further information, contact James Murray, 301-496-3116, DCC&P, NCI.

CREG Application Requirements

ELIGIBILITY Nonprofit organizations and institutions, state and local governments and their agencies, authorized federal institutions, and individuals according to NIH grant policies.

SUBMISSION Use the standard grant application form NIH 398. In both the covering letter and at the top of the space provided for an abstract on page 2 of the application, identify the CREG announcement by its title and number and the date of publication (Sept. 19, 1975), as the one to which the application responds. Mail the application and letter to Div. of Research Grants, NIH, Bethesda, Md. 20014. Form NIH 398 may be requested from the Div. of Research Grants.

RECEIPT DATE Applications received on or before Feb. 1, 1976, will be processed for study section review in June 1976.

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 NO1-CO-65329-08

Title: *Technical writing and telephone answering services in response to cancer-related public inquiries*

Deadline: *Probably mid-December*

Technical support in responding to public inquiries by letter and by telephone. In addition to these services, the NCI will require the maintenance of a reference file and the capability to gather and tabulate statistics.

An estimated 20,000 man-hours per year for the letter writing portion of this three-year project will be required to respond to questions regarding such areas as: 1) appropriation, 2) contracts and grants, 3) approved and unapproved treatments, 4) cancer biology, cause, prevention, detection and diagnosis, and 5) the status of clinical and research facilities. NCI will make available information systems and services as well as a "response book" of standard replies for facilitating response. The organization selected will be responsible for keeping all responses current as new facts and figures are available, as well as having the capability to prepare, on specific assignment from NCI, enclosures for written responses such as booklets and fact sheets.

Written inquiries shall require separate approaches depending on the substance of the letter and the urgency of response as determined by the NCI project officer. The contractor will be answering letters from the White House, Congress and various governmental departments and agencies. Further, the selected organization will be responsible for translating foreign language written inquiries. Typing, routing and mailing of most responses will be required.

The contractor will develop and maintain a 24-hour, seven day a week, capability to monitor and respond, personally, to incoming telephone calls from across the United States.

The contractor will establish and maintain facilities within a reasonable commuting distance of NCI, as well as provide regular messenger service between these two facilities. The contractor will also be required to provide 1,000 sq. ft. of secure storage space for letter writing materials.

It is anticipated that a bidder's conference will be held after release of the RFP. The date, time, and location of the conference will be set forth in the RFP.

Contract Specialist: Anita Schwartz
Control & Rehabilitation
301-427-7984

RFP NCI-CB-64017-33

Title: *Assessment of manpower needs in selected clinical oncology specialties*
Deadline: *Nov. 4*

This project is directed toward estimating future manpower requirements for major oncology specialties. The principal focus is to be on medical oncology (a sub-specialty of internal medicine), gynecologic oncology (a sub-specialty of gynecology), pediatric hematology-oncology (a sub-specialty of pediatrics), maxillofacial prosthetics (a sub-specialty of prosthetics), and surgical oncology.

In order to demonstrate the feasibility of the proposed methodology for generating manpower requirements this project will be conducted in two phases. Phase I will seek to determine the future requirements for pediatric oncologists by assessing specifically the proportions of their services and skills presently directed toward pediatric leukemia, the neoplasm of highest prevalence in the pediatric age range. After results from phase I are submitted to the project officer and approved, phase II will be initiated.

For phase II, the methodology used and perfected in phase I will be applied to the estimates of manpower requirements for the other specialties listed above, using those forms of cancer of greatest prevalence seen and managed by each of these types of specialists. By determining the proportion of time devoted by each oncologic specialty to the various common forms of cancer, and by securing estimates of the prevalence, incidence and survival rates of these forms as well as the current numbers of qualified oncologic specialists in practice and in training, it should be possible to estimate current and future manpower requirements in the selected oncologic specialties over selected short-term time periods.

The contractor shall develop or adapt a methodology for determining general patterns of diagnosis and care for the principal cancer types and sites that require the services of professionals in the specialties listed in the overview. These patterns will highlight those services requiring the specialist and related health care professionals. For each specific service highlighted, the contractor will obtain data to estimate the amount of time required to perform that service.

Using the most current cancer incidence and prevalence data as well as projected trends, the number of patients projected for each of the specific types of cancer will be estimated. Using these estimates and the defined patterns of care, the contractor will develop projections of the numbers of each of the specific services previously cited as being required. As a result, estimates of the present requirements for each of the specialty types can be computed and projected for five and 10 year periods.

The entire study should be completed in a nine-month period. The interim phase I report will be delivered at the end of three months, with substantive results reported at the presentation suggested for the middle of the third month (after two and one-half months).

Contract Specialist: Donald Broome
Biology & Diagnosis
301-496-5565

RFP NO1-CP-65744-69

Title: *Induction of colon tumors in guinea pigs*
Deadline: *Nov. 28*

Carcinoma of the colon is one of the major types of cancer in the United States and other western countries. The etiology is unknown and current studies indicate that it may be of a varied and complex nature. Because definition of the etiology is a difficult and time consuming problem, the Carcinogenesis Program of NCI is interested in developing an

animal model for colon cancer and using it for studies for determining effective measures for interfering with the carcinogenic process.

The objective of the project proposed is to induce carcinoma of the colon in guinea pigs with known chemical carcinogens in order to provide a model to study the effects of BCG on the carcinogenic process.

The initial phase of this study will be concerned with developing the most appropriate model system and establishing the dose response for induction of carcinomas of the left colon and rectum. In defining a specific model, the following guidelines are to be used as a minimum:

1. Primary interest is in two strains of guinea pigs, namely Hartley stock and inbred strain 2.
2. The chemical carcinogens to be tested in the guinea pigs are those which are known to produce colon cancer in rodents. These are 1,2-dimethylhydrazine (DMH), methyl-N-nitrosoguanidine (MNNG), and N-methyl-N-nitrosourea (MNU).
3. Both the parenteral and rectal routes of dosing should be considered.
4. Preliminary tests may be necessary if available data on the test chemicals are inadequate to predict the dose level that should be used. The offeror should describe and define the testing procedure to be used.

When the model has been defined and the dose response determined, BCG will then be administered by different routes (intradermal, intravenous, oral, rectal) to groups of 100 guinea pigs coincident with a dose of carcinogen which will produce tumors in approximately 25% of the animals. Guinea pigs will be observed fro at least 18 months. An additional group of 100 guinea pigs will receive the same carcinogen at a level to induce tumors in 90% of the animals. After an appropriate interval laparatomies will be performed. Early macroscopic lesions will be biopsied and injected with BCG. Exact location of each lesion will be noted. Animals will be observed for an additional 10 months. All guinea pigs that die during the observation period will be necropsied and those surviving at the end of the 12 months period will be sacrificed and autopsied. Appropriate tissues from all animals will be examined histologically.

The source for guinea pigs should be specified in the proposal. Outbred Hartley guinea pigs shall be obtained from an established and reliable dealer. They must be free of clinical diseases such as salmonellosis, lymphadenitis, endoparasites, lymphcytic choriomeningitis, toxoplasmosis, and psudotuberculosis. When delivered, all animals must be physically sound and in a healthy condition and must be free of wounds, scars, external parasites and clinical signs of disease.

The government estimates that performance of the project will entail approximately two man-years of effort per year, over a three-year period.

Contract Specialist: Linda Waring
Cause & Prevention
301-496-6361

RFP NCI-CP-VO-61021-54

Title: *Monitoring of biohazards containment facilities*

Deadline: *Not yet determined*

NCI is seeking a contractor to perform the following tasks: (1) Perform site visits to virus production facilities for the purpose of evaluating compliance with specified safety standards and advise for enhancement of work environment; (2) Evaluate an existing safety and environmental program for contract viral oncology laboratories; (3) Improve the aforementioned program; and (4) Provide environmental microbiology and engineering consultation to parties seeking assistance from the Office of Biohazard & Environmental Control.

Accomplishment of these tasks will require expertise in environmental microbiology, environmental health, virology, microbiology, immunology, mechanical engineering, and technical writing. The capability of performing continual literature review for recent developments in viral oncology, biohazard risk assessment, research techniques, and environmental control will be required.

Organizations interested should submit resumes of their qualifications and experience.

Contract Specialist: J. Thomas Lewin
Cause & Prevention
301-496-1781

RFP NCI-CB-64014-35

Title: *Preparation and preliminary testing of sputum samples for automated screening*

Deadline: *Nov. 24*

NCI is interested in establishing a contract to apply techniques of specimen preparation, dispersion, staining and quantitative analysis which have been developed for gynecologic cytology specimens to sputum cytology specimens. The contractor will collect by appropriate methods, sputum specimens from: (a) normal individuals of both sexes predominantly over age 40; (b) patients with malignant broncho-pulmonary diseases; (c) patients over 40 with benign broncho-pulmonary diseases. The methods of collection should conform to the best currently recommended practice.

Contracting Officer: C.V. Baker
Biology & Diagnosis
301-496-5565

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