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"NATIONAL CLEARINGHOUSE" TO GUIDE SELECTION, TESTING, EVALUATION OF SUSPECTED CARCINOGENS

NCI has canceled the charter for the proposed new environmental carcinogenesis committee and has upgraded the proposal into a "National Clearinghouse on Carcinogenesis" concept. The Clearinghouse will have an expanded role, encompassing epidemiology as well as carcinogenesis, with Div. of Cancer Cause & Prevention Director James Peters directly responsible for it.

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In Brief

AACR, ASCO MEETINGS IN TORONTO; REGIONAL PLANNERS THREATEN CANCER PROGRAM DELAYS

CHARLOTTE FRIEND'S Presidential Address at the American Assn. for Cancer Research annual meeting is titled, "The Coming of Age of Tumor Virology." Henry Kaplan will deliver the H.A. Clowes Memorial Lecture on "Hodgkin's Disease and Other Human Malignant Lymphomas: Advances and Prospects." The meeting is May 5-8 in Toronto. A four-session symposium on environmental carcinogenesis is generating considerable interest, and papers will be presented on various aspects of clinical investigation, virology, immunology, biochemistry, chemical carcinogenesis, experimental chemotherapy, clinical pharmacology, biology and genetics. A discussion is scheduled on "Critical Issues in the Development of National Cancer Research Programs". . . . **EMIL (JAY) FREIREICH** will deliver the David A. Karnofsky Memorial Lecture at the annual meeting of American Society of Clinical Oncology, May, 4-5, also in Toronto. Freireich's subject: "Who Took the Clinical Out of Clinical Research: Mouse or Man?" . . . **CANCER CONTROL** & Rehabilitation Div. at NCI is still trying to recruit medical oncologists, diagnostic radiologists, epidemiologists, behavioral psychologists, and community physicians for important staff positions. Contact DCCR Director Diane Fink, 301-427-7996. . . . **NEW SYSTEM** for health facility planning through federal Health Services Administration regional bodies threatens to engulf NCI grant and contract awards in a sea of red tape and delays. Federal law requires that any new program or project that "impacts" an area's health picture must have regional HSA approval. Cancer center construction and core grants, and cancer control prevention and detection programs have been listed by HSA as projects needing clearance. President's Cancer Panel Chairman Benno Schmidt and Member Lee Clark were appalled at the prospect of adding months or years to the ever-lengthening grant and contract award process. "It's a lot worse than RMP ever was," Schmidt said. "Worse," Clark agreed. "Once they close in on you you can't move an inch." Before the regional groups become fully operational, the law authorizing them will expire (at the end of this year). Schmidt and Clark agreed to attempt to get cancer programs exempted in the renewal legislation.

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NCI TO ESTABLISH CLEARINGHOUSE; KEPONE CAUSES ANIMAL LIVER TUMORS

(Continued from page 1)

Arnold Brown, chairman of the Dept. of Experimental Pathology at Mayo Clinic, is still NCI Director Frank Rauscher's choice to head the new group, as he was to be chairman of the proposed committee. Brown's acceptance of the post depends on Mayo permitting him the time away from his duties there.

The Clearinghouse will include four subgroups—one for selection of compounds to be tested; one for definition of experimental design appropriate for each compound being tested; one to evaluate the data after each test is completed; and one to evaluate the risk-benefit ratio and societal problems involved. There also will be a steering committee consisting of members from each of the four subgroups.

The Clearinghouse will consist of 25-30 members, with only one or two from NCI. Representatives from other federal agencies—EPA, FDA, National Institute for Environmental Health Sciences, National Institute for Occupational Safety & Health, and perhaps others—will also be members. The scientific community will contribute pathologists, epidemiologists, statisticians, experimentalists.

James Sontag of NCI will be executive secretary.

Meetings of the Clearinghouse and its subgroups will be open. "We want to open up the process of selecting, testing and evaluating potential carcinogens," Rauscher said. It will provide a wider forum for discussions of what is carcinogenic and what is not. The science is not exact, and is open to adversary interpretation at all levels.

Brown received high marks for his conduct of the investigation into the reliability of tests which indicated cyclamate might be carcinogenic. It was an exhausting survey, completed in a few months with the report to Rauscher submitted by the scheduled deadline. It demonstrated, as perhaps no other recent effort has, that present bioassay systems are not reliable enough to prove the danger posed by a weak carcinogen and that such compounds probably cannot be banned entirely if they offer benefits that outweigh the unproven risks.

Rauscher and FDA Commissioner Alexander Schmidt have discussed resolving the cyclamate question in this manner: It probably isn't dangerous enough to ban entirely, but enough doubt remains to justify keeping it out of products where it will be consumed in great quantities by large numbers of people. It's possible FDA will permit its use as a table top sweetener, for persons with diabetes or obesity problems, but it won't go into soft drinks, where heavy users could get up to 12 grams a day.

NCI announced this week that its tests of chlordecone (Kepone) have determined that it causes liver cancer in rates and mice. The tests were conducted under the carcinogenesis screening program. NCI said the findings are considered definitive for animal studies but would not offer predictions of human risk.

Chlordecone was selected for testing because of its chemical structure as one of a series of halogenated chemicals related to known or suspected carcinogens, its presence in human general and occupational environments, and its tendency to be retained in body tissues.

The hydrated form of technical grade chlordecone was administered in feed to both rats and mice, males and femals of each species, and at two dose levels. About 50 animals were placed in each of these eight treatment groups. In addition, control animals were maintained under the same conditions but were not given the chemical.

Treatment with chlordecone lasted for 80 weeks for both rats and mice. The animals were observed until scheduled termination of the test at 90 weeks after start of treatment for mice and 112 weeks for rats.

At the higher dose level, 88% of male mice (43 out of 49) and 47% of female mice (23 of 49) developed liver cancer. At the lower doses, 81% of male mice (39 of 48) and 52% of female mice (26 of 50) developed liver cancer. Among control mice, 16% of males (8 of 49) but none of the females developed liver cancer.

With rats at the higher dose level, liver cancers were seen in 7% of males (3 of 44) and in 22% of females (10 of 45). At the lower dose levels, neither male nor female rats exhibited a significant increase in liver cancer incidence, although one of each group developed liver cancer. No liver cancers were seen in any of the control rats of either sex.

In diagnosing these tumors, pathologists defined as hepatocellular carcinomas (liver cancer) all those judged to have potential for progressive growth, invasion, metastasis, and death in the host animals.

Besides liver cancer, scientists observed other abnormal conditions in chlordecone-treated animals. Extensive non-cancerous liver damage was found in treated animals of both species. Male mice at high doses had severe tremors, and some were observed to be highly excitable during the second year of the study. Treated rats displayed rough coats and skin damage during the second year and became anemic. Treated rats that survived until the end of the study were generally in poor condition.

Copies of the 25-page chlordecone report and additional information are available from the Office of Cancer Communications, NCI, Bethesda, Md. 20014.

The National Cancer Advisory Board's Subcommittee on Carcinogenesis will take one more look at the "final" draft of its "General Criteria for Assessing the Evidence for Carcinogenicity of Chemical Substances" (*The Cancer Letter*, March 12). Subcommittee Chairman Philippe Shubik will call a meeting sometime in

May to give members and the subcommittee's consultants one last (hopefully) chance to revise it.

NCI TO SEEK CANCER ACT REVISIONS RELATED TO CENTER GRANT LIMITS

An interpretation by NIH General Counsel Richard Riseberg of National Cancer Program authorities related to the funding of centers probably will lead to some revisions when the National Cancer Act is renewed next year.

NCI has not been awarding center core grants under the Cancer Act but has continued using the authority it had under Section 301 of the Public Health Service Act. The National Cancer Act included a three-year limit, $5 million per year maximum on core grants; the PHS Act did not.

Riseberg advised NCI that the Cancer Act provisions superseded the PHS Act and that the restrictions would have to be applied. The three-year limit does permit additional renewals, up to three years each, but only with full-fledged review under the competitive grant renewal process.

NCI preferred to make awards under the PHS Act which permits center core grant awards of up to five years before full-fledged review for renewal.

Neither the three-year limit nor the $5 million maximum will affect any centers this year, but it will become a problem unless those restrictions are removed from the Cancer Act next year.

The problem was brought to the attention of the President's Cancer Panel last week. It appeared more serious than it turned out to be because NCI executives had misinterpreted Riseberg's advice and concluded that he had told them the $5 million limit applied to all NCI-funded awards to a center, including regular research grants and contracts. That would have been of immediate and major concern: more than 20 centers presently have grants and contracts totaling more than $5 million.

Language in the Cancer Act relating to the $5 million limit is explicit and clear, and it was difficult to see how any interpretation could apply it to other than core grants. Panel Chairman Benno Schmidt called for a meeting with Riseberg and NIH Director Donald Fredrickson to straighten the matter out.

When ***The Cancer Letter*** checked with Riseberg following the meeting, he expressed surprise that such an interpretation had been given to his advice. He quickly conferred with Div. of Cancer Research Resources & Centers Director Thomas King, who then confirmed that it had been a misunderstanding and that the limit would apply only to core grants.

NIH INQUIRY FINDS NO IMPROPRIETY IN TREATMENT OF DEVITA'S SON

Charges in an anonymous letter sent to Asst. Secretary for Health Theodore Cooper that the son of NCI Div. of Cancer Treatment Director Vincent DeVita had received special privileges at the NIH Clinical Center resulted in an investigation by the NIH Medical Board which found that there has been "no improper behavior or abuse of privilege."

NIH Director Donald Fredrickson issued a statement which said:

"Dr. Frank Rauscher and I have reviewed the report of the NIH Medical Board concerning the circumstances under which Teddy DeVita was admitted to and has continued to receive treatment at the NIH Clinical Center. We agree that there has been no improper behavior or abuse of privilege by NIH personnel in their decisions regarding treatment of the DeVita boy. No evidence has been found of medical mismanagement of a deceased child who, though not named, was apparently referred to in a widely publicized anonymous letter. We sympathize with the families of both children and deplore any action that adds to the burden which they already bear. We consider the matter closed."

The Medical Board's report said, "It is the unanimous view of this committee that there was no evidence of special privilege involved in the initial introduction of laminar air flow room treatment for Theodore DeVita, or his maintenance in these facilities for an extended period of time.

"The circumstances surrounding the initiation of LAFR treatment were as follows. He was admitted to the Pediatric Oncology Branch Sept. 7, 1972, because of the sudden development of aplastic anemia. There was an ongoing program in NCI for the use of matched platelet transfusions to support patients with leukemia and aplastic anemia. Shortly after admission he became infected. Completed studies of LAFR therapy had shown it capable of reducing infection in patients with severe marrow suppression. There was no specific protocol for the treatment of patients with aplastic anemia in the LAFR facilities. The decision to place Theodore DeVita in LAFR was made by Drs. Arthur Levine and Ronald Yankee, with the subsequent concurrence of Dr. Edward Henderson. The decision resulted from their acknowledged success in using these two separate forms of support, and in their feeling that it would be unethical not to attempt such combined therapy in this patient. Further, the success of long-term HLA-matched platelet support in such patients then under study by Dr. Yankee could not be assessed in a patient subject to repeated and potentially lethal infections. All those involved believed that the patient would either recover or die within six months. The decision was presented to Dr. and Mrs. DeVita who, after consideration, consented.

"At that time, Dr. DeVita was Chief of the Medical Branch, which was one of three clinical branches of the Medical Oncology Program in the Div. of Cancer Treatment, NCI. The Pediatric Oncology Branch was one of the three branches and its acting chief was Dr. Edward Henderson, who was the supervisor of Drs. Levine and Yankee. Dr. DeVita had no authority over the decisions pertaining to his son's admission to and

management in LAFR. There were no NIH prohibitions to the admission of relatives of NIH employees to the Clinical Center.

"Once the decision to initiate this therapy was made and implemented, further decisions concerning his continuing care in LAFR followed naturally and inexorably.

"After a stormy first month, the patient cleared his infection and has since remained relatively free of them. In spite of a number of therapeutic attempts to revive his bone marrow, he has remained severely aplastic. Patients with granulocytes in this very low range have an overwhelming chance of fatal infection within two weeks of exposure to a non-sterile environment. There has been no way in which LAFR isolation could be ethically discontinued. Bone marrow transplantation has been repeatedly considered but was not and is not feasible in the absence of a compatible donor.

"In October 1974, Dr. DeVita was appointed Director, Div. of Cancer Treatment by Dr. Frank Rauscher, Director of NCI. They had thoroughly discussed the fact that Dr. DeVita's own son was under treatment in facilities of NCI which would now be for the first time under his supervision. Dr. DeVita asked Dr. John Ziegler, then Chief of POB, to assume the position of Deputy Clinical Director, NCI, replacing Dr. George Canellos. It then became necessary for Dr. DeVita to appoint a new Chief of POB. Dr. Arthur Levine was appointed to this position on June 3, 1975 after due consideration of a number of candidates. The documentation provides evidence that decisions made by Dr. DeVita in the administration and reorganization of POB have been made on a rational basis, in the best interests of the NIH, and have been unrelated to the presence of his son in the laminar flow room. These decisions were all made with the prior approval of Dr. Rauscher.

"In summary, we feel that any child who presented with this problem in September, 1972, would have received the same initial and continuous treatment. Based on the experience with Theodore DeVita, it is clear that a similar decision for long-term admission to LAFR could not be justified today. We feel that the prolongation of life in such isolation in no way compensates for the sacrifice in the quality of life. It is impossible for anyone to understand fully the agony of the parents and their child who can touch each other only through a vinyl barrier."

The Board looked into charges that another youngster was denied the same treatment and subsequently died. The report said that "voluminous physician and nursing care notes attest to the sophisticated and heroic measures that were taken to support this unfortunate young man," and listed reasons why LAFR use was not recommended. The Board also considered charges expressed in another anonymous letter sent to the Candlelighters which were "deliberate efforts to discredit personnel in POB." It acknowledged that problems existed within the Branch and notes that "certain administrative steps" have been taken to correct the problems "and that there has been some improvement."

A complete report on the problems within the Branch, steps taken to correct them, and the DeVita situation appears in the April issue of Science.

DIET GRANT GUIDELINES AVAILABLE; NIH SAYS THEY'RE CREGS, GORI SAYS NOT

The *NIH Guide for Grants and Contracts,* dated March 29, was out last week with the guidelines for the first round of grants in the Diet, Nutrition & Cancer Program, referring to them as "Cancer Research Emphasis Grants (CREG)". The Guide also specifies that applications will be reviewed by NIH Div. of Research Grants study sections.

That isn't exactly the way it's going to be, according to Gio Gori, director of the program.

Gori had concluded that CREGs, going through the DRG study section review, would require up to 14 months before awards could be made. He has $6 million in the program, and must obligate it before the end of the fiscal year, Sept. 30. Gori thus obtained approval from NCI Director Frank Rauscher to get the program going with "program grants," which would be reviewed by NCI-established groups with personnel borrowed from various Div. of Cancer Cause & Prevention contract review committees plus a few sent over by DRG.

Gori told ***The Cancer Letter,*** "I don't care what they call it, CREGs or program grants or anything else." But he insisted applications would not go to DRG, that review would be completed prior to the September meeting of the National Cancer Advisory Board, and with NCAB concurrence awards will be made before Sept. 30.

May 14 is the deadline for applications. Organizations wishing to submit applications should obtain the March 20 *NIH Guide* for complete details on each project, or contact Gori, phone 301-496-6616.

Seven project areas are included in this round:

Effect of Carcinogens in Different Strains of Rats

The applicant will select carcinogens for testing, with an emphasis on naturally occurring carcinogens. Carcinogens should be chosen from several classes of compounds, as opposed to testing only closely related compounds, and should have been previously and adequately tested in mice. Criteria for selecting the specific carcinogens will be reported.

The investigator will also design the experiment for testing the selected carcinogens, including the level(s) of dosage for administering these substances. A relatively low dose administered over a period of time is preferred to a high dose for a short duration. The design will involve testing in various strains of laboratory rats plus at least one strain of wild rats. The age at which rats are placed on the experiment (weanling vs.

adult) and the time that rats are on the experiment should be addressed in the proposal. Ration formulation should be explained since this project has implications for other nutrition-related projects. Sufficient numbers of rats should be included in the experimental design to allow meaningful statistical analysis of the results.

Complete histological, pathological, and metabolic data will be collected, along with information on tumor development such as time to tumor formation, tumor location, and tumor type. Food consumption and weight gain will be recorded as part of the metabolic data. Specific methods and procedures will be developed by the applicant. Since the DNCP is a coordinated multidisciplinary research program, the applicant may be required to provide access to biological samples (e.g., microscope slides) which can be studied by other investigators.

The investigator will subject the data to statistical analysis to determine whether there are differences in strain response to a given carcinogen. Furthermore, the investigator will compare the results of this project to information on mouse cancer models and will discuss the similarities and differences in the two species in regard to response to carcinogens.

Level of effort—Two to three person years of professional labor and six to 10 person years of technical labor.

Development of Procedures for the Metabolic Study of Adult and Pediatric Cancer Patients

The investigator will review the existing literature and identify a set of metabolic evaluation techniques which have a high likelihood of use in future clinical trials involving hospitalized adult and pediatric cancer patients. Initial emphasis should be given to those techniques used for evaluating changes in protein metabolism, energy metabolism, and body composition. Adult and pediatric tumor type-treatment modality combinations which appear to have major effects on body metabolic processes will also be reviewed. The information generated by the reviews described above will be used to develop guidelines for selection of patients and techniques to be evaluated in this project. On the basis of these guidelines, the investigator will then develop a protocol for the admission of patients to the metabolic study.

At the completion of the evaluation phase of the project, the investigator will produce a report describing in detail the recommended techniques and procedures for evaluating metabolic changes in hospitalized adult and pediatric cancer patients.

Level of effort—Two to three person years of professional labor and four to six years of technical labor.

Role of Dietary Fiber Sources on Intestinal Function and Cancer Development in Humans

The applicant will develop a protocol to systematically evaluate, in humans, the functional role of various dietary fiber sources and components in parameters such as intestinal function and fecal composition. This information will ultimately be used to develop specific, testable hypotheses on the role of dietary fiber or fiber components in human carcinogenesis. Because of the indications of present epidemiological data, initial emphasis will be placed on factors relative to cancers of the colon and large intestine.

In the application, the proposer will consider and discuss such items as experimental design, fiber sources and components to be evaluated, fiber analysis techniques, length of experimental periods, selective criteria for human subjects, sampling intervals and techniques, basal dietary regimen of subjects, dietary control procedures, standardized biochemical and metabolic parameters to be evaluated in humans, data collection and storage procedures, and data analysis.

Effect of Fat Saturation and Level on Spontaneous and Chemically Induced Cancers

The applicant will propose a protocol for this experiment which will be evaluated through a peer review system. Since another closely allied DNCP project will evaluate the role of fat type (i.e., animal and vegetable) in cancer incidence, recipients of both grants will be required to coordinate their protocols in consultation with the project officer so the maximum amount of information can be gained from the research efforts. The project officer will approve the common protocol including ration formulation before actual studies are begun.

Applicants will consider as a minimum the following points in their proposal and will include justification for their selection:

—Animal model considerations. Mice are suggested. Other considerations include tumor types to be studied, carcinogens to be used, method of administering the carcinogens and spontaneous tumors to be evaluated.

—Animal housing and environmental considerations, dietary considerations, experimental design and data analysis, data collection plans and procedures, and autopsy considerations.

Level of effort—Two to three person years of professional labor and eight to 12 of technical labor.

Effect of Fat Type and Level on Spontaneous and Chemically Induced Tumors

The research scope is nearly identical to that described above for the preceding project, as is the level of effort required.

Epidemiologic Study of Dietary Components and Cancer Development

The applicant will propose specific experimental population(s) which exhibit unique characteristics with respect to dietary/nutrient intake or with respect to cancer type or incidence which has a suspected dietary component in its etiology. Preference will be given to innovative studies of populations in developed nations. Proposals which include corre-

lation of metabolic compounds in body pools with dietary and cancer data are covered by a separate request for proposal and will be funded through the contract mechanism. Studies which popose fluid or tissue sampling by invasive techniques are excluded under this request. Researchers will collect data on the dietary and nutrient intake and associated information on selected populations. These data will be used to delineate the interrelationship between diet and cancer development.

Proposals will be accepted for research on the following topical areas:

1. Populations at high and low risk for cancer types with a dietary link.
2. Populations having a known high or low intake of specific dietary components.
3. Populations known to develop extreme dietary excesses or deficiencies due to psychological (or iatrogenic) causes, and
4. Populations known to have unique dietary intake due to cultural, geographic, or religious factors.

If the proposed research covers more than one topical area or is phased, separate cost estimates should be presented according to topical area/phase.

Level of effort—One to four person years of professional labor.

Effect of Nutritional and Environmental Stress on Carcinogenesis

The applicant will design and conduct an experiment to systematically evaluate the effect of various stresses on food and nutrient intake and cancer incidence. The applicant will select for the purposes of this project stresses, particularly those suspected of altering (either increasing or decreasing) food intake and carcinogenesis. Suggested stresses might include temperature, exercise, lighting, sound, confinement, or nutrient intake (deficient or excessive). The administration of these stresses and criteria for their selection will be outlined by the applicant.

The applicant will discuss the selection of experimental animals for the project including rat strain and line, tumor model, carcinogen tumor type to be utilized and the method and dosage of administration.

A semipurified ration will be fed to the animals. The applicant will propose a suggested formulation for the diet. The actual formulas used will be provided by the project officer before the animal studies begin.

Level of effort—One to three person years of professional labor and two to four of technical labor.

Contract Awards

RESEARCH TRIANGLE LANDS FIRST PLANT DRUG DEVELOPMENT RENEWAL

Research Triangle Institute is the first of four existing contractors in NCI's program to isolate antineoplastic agents from plants to win a three-year renewal of its contract. The North Carolina institution received an award of $565,493 for the three years, almost the same level as its previous contract.

NCI said additional awards would be made in the program. The other existing contractors—the Universities of Arizona, Illinois and Virginia—competed with about 20 organizations for the new awards.

The Univ. of Virginia received last week a $15,693 supplemental award to its existing contract.

In another contract award announced last week, NCI presented its first CIDAC (Cancer Information Dissemination and Analysis Center) contract to Stanford Research Institute. The two-year award totals $462,379.

. SRI will compile abstracts from the literature on chemical, environmental and radiation carcinogenesis, store them in a computer retrieval system and send them periodically to investigators with interests in those areas. Additional CIDACs will be established to cover other fields of cancer research. NCI hopes that all will be operational by the end of 1976.

Other contract Awards:

Title: Studies of carcinogenesis in organ culture of trachea and bronchi
Contractor: State Univ. of New York, Albany, $162,387.

Title: Non-ristone DNA binding proteins
Contractor: Vanderbilt Univ., $302,598.

Title: Study on UV photocarcinogenesis
Contractor: Temple Univ., $188,630.

Title: Studies of the molecular mechanism of carcinogenesis by oncogenic viruses
Contractor: Univ. of Illinois, $119,418.

Title: Maintenance of animal holding facility to support research
Contractor: Flow Laboratories, $179,529.

Title: Development of data for Connecticut tumor registry
Contractor: Connecticut Dept. of Public Health, $58,195.

Title: Purification of antigens; preparation of antibodies
Contractor: George Washington Univ., $161,094.

Title: Breast cancer detection demonstration project
Contractors: Wilmington Medical Center, Wilmington, Del., $265,415; and Total Research Corp., Princeton, N.J., $296,336.

Sole Source

RFPs GO OUT TO 16 COOPERATIVE GROUPS, FOR COMMUNITY EXTENSION

NCI has issued sole source RFPs to 16 Clinical Cooperative Groups in the project aimed at helping the groups extend their clinical investigation efforts into community hospitals. The Div. of Cancer Control & Rehabilitation has allocated $2 million for the first year of the project.

DCCR has received letters of intent from only 12 groups and still expects to award contracts to no more than 10, probably less (*The Cancer Letter,* March 5). It was determined, however, that the RFPs had to be made available to all cooperative groups still approved for continued funding, with the exception of the VA based groups.

Average annual funding of those which receive awards will be $250-300,000. Contracts will be awarded for three years, with probable renewal for at least three more years. "We look at this as a long-term commitment," said James Wallace, chief of the Treatment, Rehabilitation & Continuing Care Branch.

Sole source awards announced last week include:

Title: Evaluation of thermography in mass screening for breast cancer.
Contractor: Health Insurance Plan of Greater New York.

Title: Incorporation of seven additional alteration/renovation projects, as well as expansion of research effort in the viral oncology program and equipment needs in the basic research program area.
Contractor: Litton Bionetics.

Title: Japan-Hawaii cancer study
Contractor: Kuakini Hospital and Home, Honolulu.

Title: Biomedical computing software services in support of the clinical and diagnostic trials program
Contractor: EG&G/Mason Research Institute.

Title: Animal holding and breeding for detection of tumor virus information
Contractor: Flow Laboratories.

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-CP-65791-68

Title: *Gustatory (taste) evaluation of cancer patients*
Deadline: *May 13*

The objective of this project is to evaluate changes in the primary senses of taste: sweet, sour, salt, bitter, in cancer patients in terms of taste preference, acuity and recognition. A basic knowledge of gustatory alterations in cancer patients will have immediate implications for food selection and seasoning to produce a diet acceptable to the anorectic cancer patient. Furthermore, this fundamental information regarding taste changes will be utilized in formulating future research in behavioral and food modification regimens for anorectic patients. Prospective offerors should have knowledge and experience of taste evaluation techniques and should have access to adequate and suitable resources.

RFP NO1-CP-65790-68

Title: *Evaluation of the role of learned food aversion in the cancer patient*
Deadline: *May 13*

The objective of this project is to determine if food aversion, learned in response to cancer therapy, contributes to anorexia. Anorexia in cancer patients will be assumed to be a multi-dimensional problem, but this project will strive to examine one aspect of its cause. Prospective offerors should have knowledge and experience with cancer oncology, and learned response mechanisms, and should have access to adequate and suitable resources.

RFP NO1-CP-65787-68

Title: *Application of behavior modification techniques in the treatment of anorexia in the cancer patient.*
Deadline: *May 13*

The objective of this project is to develop behavior modification techniques and evaluate their effectiveness in improving the caloric and nutrient intake of both pediatric and adult cancer patients. Prospective offerors should have knowledge and experience with techniques for behavior modification of food intake and knowledge and experience of cancer oncology.

Contract Specialist for the above three RFPs: K. Born
Cause & Prevention
301-496-6361

RFP NCI-CP-VO-61039-66

Title: *Holding facility for small laboratory animals*
Deadline: *May 3*

The contractor will provide facilities for holding 7,000 mice, 250 rats, and 25 rabbits, with affiliated technical operations, at a level of effort requiring three animal biology technicians or their equivalent and four animal caretakers. The facilities should exist or be established so as to provide physically distinct areas at one location for the different types of animals, and additionally be capable of subdivision so as to permit separate housing of subgroups of animals of the same species assigned to various experiments. Additionally, there should be a general area to provide the capability for miscellaneous support services and for research manipulation of animals away from their normal holding location. The facility must be provided within a 30-mile radius of the NIH reserva-

tion to enable adequate utilization by intramural NCI staff.

The technical operations required are as follows:

Order, receive, and establish up to 2,500 mice and 50 rats per month from NIH sources. Maintain between 15 and 20 transplantable mouse and rat tumor lines by subcutaneous inoculation or intraperitoneal inoculation. Perform procedures related to the safety testing and quality control of human tumor skin test antigens—inoculation of 100 nude mice per month with observation for one month, and immunization and testing with the skin test antigens of approximately 400 mice per month. Provide routine daily transportation of caged animals to and from laboratories on the NIH campus.

Contract Specialist: Clyde Williams
Cause & Prevention
301-496-1781

RFP NO1-CN-65339-09

Title: *Information storage and retrieval system for cancer patient rehabilitation*

Deadline: *May 28*

The objectives of this procurement are to develop an information system that will reflect the present state of the art of cancer patient rehabilitation, and, secondly, will identify the resources where the state of the art is optimally practiced. This information is to be identified, accumulated, categorized, prepared for computer storage and easy retrievability and finally prepared into a source book of information.

The contractor shall establish the criteria for determining the nature, type and characteristic of the material to be included in the information compilation. Criteria shall be submitted to and approved by the NCI project officer prior to implementation.

The contractor shall call together a five member team of medical experts to establish criteria and develop an overall plan for the selection, categorizing and evaluation of material to be included in the final information compilation. Additionally the contractor shall provide for advice, consultation and continuing input to this team from other health professionals. The vice president for service rehabilitation of the American Cancer Society shall serve as an expert consultant to this team.

All information acquired as a result of this procurement shall be prepared for computer storage by the offeror in such a way as to ensure easy input and retrievability to the stored data base of the NCI Clearinghouse. Although the contractor will not be responsible for retrieval of the information, the contractor shall utilize a program format compatible with that currently employed by the NCI National Cancer Information Clearinghouse Project.

Contract Specialist: Earl Klevins
Control & Rehabilitation
301-427-7984

RFP NO1-CM-7710

Title: *New fermentation antineoplastic drug acquisition, evaluation, development, and screening*

Deadline: *May 15-May 20*

Project to find new antibiotics with antineoplastic activity. The contractor must provide and operate a biochemical, biological fermentation laboratory with a pilot plant facility to produce and isolate potential antineoplastic antibiotics. It is anticipated that two or possibly three contracts will be awarded for a three year incrementally funded period of performance.

To be considered for such contracts, candidate organizations must show evidence of experience in all phases of fermentation—shake flask, stir jar, pilot plant, in vitro screening, as well as the expertise to accomplish: fermentation optimization studies; chemical isolation, purification and structural characterization of potential antitumor antibiotics produced by routine fermentation, biotransformation, and cometabolism; and the proper maintenance and preservation of active cultures.

This work will require that a maximum number of unusual organisms be obtained and evaluated under many various conditions and or many different substrates. In addition, the successful contractors must have the resources and ability to produce, isolate and purify antineoplastic material from large-scale fermentations.

In addition to the work described above, which all interested contractors must bid on, those who wish to do so may bid on optional research and development work necessary to support the primary project. These options include: in vivo assays to speed up primary screening and monitor fermentation optimization studies; develop suitable dosage forms for new agents and new in vitro screening systems to facilitate early detection and selection; preparation of clinical amounts of active antitumor compounds with safety and quality control tests; and biochemical characterization studies.

It is anticipated that the level of effort required during each of the three years of contract performance will consist of a 15 and a 21 man year effort for the primary research, and 6 to 9 man years for the optional work described.

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