THE CANCER LETTER

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1411 ALDENHAM LANE RESTON, VIRGINIA TELEPHONE 703-471-9695

NEW YEAR SEES GROWING ATTACKS ON CANCER PROGRAM; CRITICS REPEAT UNTRUE CHARGES, OMB CONTINUES CUTS

Not since the National Cancer Act was passed in 1971 has the cancer program been under more sustained attack, or threatened by such a diversity of forces. During the last month of 1974, critics, the economy and the near-sighted budget manipulators in the White House respectively have:

—Blamed the cancer program for what they incorrectly claim has been a reduction in basic research, converting some powerful forces to that view.

—Permitted inflation to drive up the cost of research while, in the name of controlling inflation, encouraged the Office of Management & Budget to attempt crippling slashes in the 1975 and 1976 cancer budgets.

NCI has repeatedly denied that it has emphasized targeted programs at the expense of basic research, and has the figures to prove it. During 1974, $305.6 million of NCI's total expenditures of $589

(Continued to page 2)

In Brief

NASA PROCUREMENT SPECIALIST NAMED NEW NCI CONTRACTS CHIEF; NIH DELAYS CREG APPROVAL

NEW CONTRACTS chief at NCI is James E. Graalman, who takes over Jan. 6 the job left vacant by Carl Fretts' promotion to NIH. Graalman, 44, has been head of NASA's procurement operations branch at the Goddard Space Center. . . . **CREG** (cancer research emphasis grant), which will switch many NCI research contracts with academic and non-profit institutions to grants, still has not received NIH approval. The request from NCI Director Frank Rauscher to NIH Director Robert Stone that the program be implemented was on Stone's desk when he was fired. . . . **RAUSCHER REAFFIRMED** NCI's intention to preserve the contract mechanism for targeted programs. Apparently, HEW's ban on grants for commercial organizations will not be lifted. . . . **CHARLES EDWARDS**, HEW asst. secretary for health, announced a few days after he fired Stone that he was resigning effective Jan. 15. He will go to work for Becton, Dickinson & Co., medical supplies manufacturer. Best guess as Edwards' replacement is his deputy, Theodore Cooper, former director of the National Heart & Lung Institute. The position requires Senate confirmation. . . . **NCI EXPECTS** difficulty in finding investigators interested in nutrition research. "We'll have to beat the bushes to get people in," Rauscher told the President's Cancer Panel. The program will be aimed at etiological and treatment implications of nutrition. NCI thinks scientists rate this type of research as less prestigious than such fields as virology and immunology. Panel Member Lee Clark thinks it may have Nobel prize possibilities, especially in work involving vitamins.

SUPPORT FOR BASIC RESEARCH INCREASED SINCE CANCER ACT WAS PASSED IN 1971

(Continued from page 1)

million went either directly into basic research or to support basic research projects. That is more than three times the amount NCI spent on basic research in any year prior to 1971 and shows a proportionate increase in the support of basic research as NCI appropriations were increased.

Critics have pointed to efforts by the Nixon and Ford Administrations to hold the line or actually cut back budgets of NIH institutes other than NCI and Heart & Lung, charging that the "politically popular" increases in cancer and heart research were being financed with money taken from other programs, most of it basic research.

There's no doubt that that was the intention of the Nixon Administration. Scientists and others inside and outside of NIH have repeated the charge so often that it is now being accepted as having actually happened. The fact is, Congress and the courts didn't let the Administration get away with it.

Congress ignored the Administration recommendations for NIH in 1973, and voted healthy increases for all institutes. When Nixon illegally impounded those increases, the courts forced their release. Congress again ignored "hold-the-line" recommendations for NIH in 1974 and 1975 and appropriated substantial increases for all institutes.

Moreover, much of the NCI-funded basic research–in virology, immunology and cell biology for instance –has broad implications for other diseases. Also, NCI has helped out other institutes by funding basic research grants the others normally would have supported.

Despite the Administration's intentions, therefore, the worthwhile research funded by NIH other than the Cancer and Heart & Lung institutes has enjoyed steadily increasing support and has not been set back by increased funding for cancer and heart programs.

The influential *Washington Post*, however, has accepted as fact charges of the cancer program critics. Post staff writer Stuart Auerbach quoted unnamed sources–scientists and NIH grantees, he said–who repeated the claims that the cancer and heart programs were hurting basic research. The charges appeared in an article describing "low morale" at NIH since the firing of Director Robert Stone.

A few days later, the Post used an editorial based on Auerbach's article.

"Scientists do question almost unanimously that creative medical research in a given field can be produced by 'good management' like so many rolls of bandages, as the political appointees in HEW's 'downtown' offices seem to believe," the Post said. "The scientists feel that exclusively 'mission-oriented research' can be as wasteful as some uncomprehending administrators consider 'basic research' to be."

That much, few will argue with. But then the Post agreed with the cancer program critics and made the flat statement:

"The trouble at NIH, as . . . Auerbach reported, is that vital research projects are stifled because too much money is spent on politically popular priorities set by the White House budget men, HEW officials, and Congress."

The editorial goes on:

"Most scientists agree that they cannot live in splendid isolation from the rest of the nation, its needs and its political and economic problems. But they do consider themselves qualified to participate in the decisions about the specific areas, methods and priorities of investigation their science ought to pursue in order to obtain the most promising results."

Stuart Auerbach knows, even if the Post editorial writers do not, that NIH has a plethora of advisory committees made up of some of the nation's top scientists "participating in the decisions about the specific areas, methods and priorities" of biomedical research. He also knows that NIH study sections, composed exclusively of scientists, must review and pass on every grant awarded by NIH. Finally, streams of scientists testify at length before congressional authorization and appropriation committees on health legislation and money bills.

It's hard to envision how scientists could effectively have much more input into the development and implementation of NIH programs.

The National Cancer Act itself was strongly supported by the scientific community when it was going through the legislative process; the *Washington Post* also backed the program then.

The fact that the Post could swallow completely the claims of the cancer program critics indicates how widespread and deeply felt are the misconceptions about it.

If these misconceptions are allowed to stand unchallenged, public support for the cancer program may be eroded, followed by a loss of congressional enthusiasm. Possible consequences: diminishing appropriations, failure to renew the Cancer Act when it expires in two years, atrophying of cancer research and of all biomedical research.

FORD TO RESUBMIT RECISION REQUEST, TRIMMING $125 MILLION FROM NCI FUNDS

The White House is determined to hold NCI spending during the current fiscal year to $566 million–$23 million less than the cancer program received in the 1974 fiscal year. Congress certainly will not accept such a drastic cut from the $691 million it appropriated, but the President's actions have forced NCI to operate at the $566 million level for the present.

President Ford, acting under the new budget act which governs and limits his authority to withhold appropriated funds, submitted in December a request

to Congress for $33.5 million in recisions and deferrals for NCI from the Administration's budget request of $600 million. (Under the terms of the budget act, a recision is a permanent cut that must have approval of both houses of Congress within 45 days of the request; a deferral is a delay on the spending of specified funds and goes into effect unless disapproved by either house.)

Congress did not act either way during the final days of the session, so the recision is dead but the deferral is in effect. As the result, NCI is forced to operate at the $566 million level, which is preventing the institute from making any new grant or contract awards.

The Cancer Letter has learned that the President will resubmit the recision request for fiscal 1975 when he releases the fiscal 1976 budget proposal later this month. That means it could be as long as 45 more days before the request is denied. To make matters worse, it has been ruled that 45 days means 45 working days, so that the delay could stretch out to two months unless Congress acts before then to deny the cuts.

The new recision will be based on the $691 million voted by Congress, which means the cuts would total $125 million.

No one really expects the cuts to stick. NCI has received memos from both NIH Director Robert Stone and HEW Asst. Secretary for Health Charles Edwards warning that it should be prepared to spend the additional $125 million during the final quarter of the fiscal year.

Meanwhile, prospective grantees whose applications had been given top priority and thus thought they were assured of funding, will have to wait until April or later for the commitments.

The silliness of the Office of Management & Budget's policies shows up in other ways. OMB has ordered a government-wide cut of 10% in travel budgets for the rest of the fiscal year. NCI is attempting to comply by rescheduling some meetings and conferences into the next fiscal year and by canceling some. But the goal can be met only by eliminating some site visits that are essential to review of some grant applications and contract proposals.

Instead, some applicants will be asked to come to Washington. Their travel costs will not show up in the restricted travel columns but will be added to their grants and contracts.

"It's a goddamn way to run an agency," one NCI executive said.

Some improvements may be on the horizon. Roy Ash, one of the diminishing number of holdovers from the Nixon White House staff, will leave as OMB director within a month. James Lynn, who has earned a reputation for fairness and sound judgment as secretary of the Dept. of Housing & Urban Development, will replace him. It can't be anything but an improvement, although Lynn may have some problems with the holdover OMB staff, most notably deputy director Paul O'Neill.

HEW Secretary Caspar Weinberger remains as a negative factor as far as the cancer program is concerned. The tumor that he would leave to become president of the Univ. of California died when Democrat Jerry Brown was elected governor. Weinberger may still leave, but even if he stays, he'll probably spend most of his time on welfare reform and national health insurance and leave the cancer program alone.

Lynn won't have any impact on the 1976 budget proposal, which will have NCI down for about $625 million, an unrealistic figure in view of a probable congressional appropriation of more than $800 million.

CONFERENCE ON DELAYED CONSEQUENCES OF THERAPY SCHEDULED JAN. 9 – 11

A conference on the delayed consequences of cancer therapy, both proven and potential, is scheduled for Jan. 9-11 at Orlando, Fla. The conference is sponsored by NCI's Div. of Research Resources & Centers.

The program and participants:

Jan. 9, Basic Mechanisms—basic mechanisms of tissue injury by chemotherapy, William A. Creasey, Yale; late tissue damage, radiobiological considerations, H. Rodney Withers, M.D. Anderson; basic mechanisms of permanent and delayed radiation pathology, George Casarett, Univ. of Rochester; discussion leader, Mortimer Mendelsohn, Lawrence Livermore Laboratories.

Chemotherapy—Oncogenicity of anticancer drugs, Curtis Harris, NCI; second malignant neoplams complicating Hodgkin's disease in remission, George Canellos, NCI; second malignant neoplasms associated with immunosuppressive medications, Israel Penn, Univ. of Colorado; the genetic and teratogenic effects of cancer therapeutic agentis, James Wilson, Cincinnati Children's Hospital; congenital anomalies among children born of mothers receiving chemotherapy for gestational trophoblastic neoplasms, Griff Ross, National Institute of Child Health & Human Development; long term effects of chemotherapy on vital organ systems, Mark Nesbit Jr., Univ. of Minnesota; discussion leaders, Umberto Saffiotti, NCI, Norman Jaffe, Boston Children's Cancer Research Foundation, Montague Lane, Baylor.

Jan. 10, Chemotherapy—Effect of immunosuppressive chemotherapy on immune function in patients with malignant disease, Jules Harris, Ottawa Civic Hospital; adriamycin and daunomycin cardiotoxicity, incidence, diagnosis, management, prevention, animal studies, Angela Gilladoga, Sloan-Kettering; effects of chemotherapy on the central nervous system, Anna Meadows, Philadelphia Children's Hospital; discussion leader, William Creasey.

Radiation Therapy—Radiation carcinogenesis, Claire Shellabarger, Brookhaven National Laboratory; possible association of systemically administered radioactive isotopes and subsequent malignant disease, Louis Wasserman, Mt. Sinai, and Nathaniel Berlin, NCI; late neoplastic changes following medical irradiation, Goerge Hutchison, Harvard; radiation effects on the gonad, C.C. Lushbaugh, Oak Ridge; histopathological basis for functional decrements in diverse irradiated organs, David White, Armed Forces Institute of Pathology; late effects of treatment of malignant disease within the central nervous sytem in children, P.H. Morris-Jones, Royal Manchester Children's Hospital; late effects of external irradiation on the hormone producing organs, Zvi Fuks, Stanford; late effects of therapeutic irradiation on the skeleton and soft tissues, Robert Parker, Univ. Hospital, Seattle; discussion leaders, James Nickson, Univ. of Tennessee, Robert Brent, Jefferson, Frank Hendrickson, Presbyterian-St. Luke's.

Jan. 11, Combined Radiotherapy and Chemotherapy—Chemotherapy and radiation associated second malignant neoplasms, Guilio D'Angio, Memorial Hospital, New York; quantification of combined radiation therapy and chemotherapy effects on critical normal tissues, Theodore Phillips, Univ. of California; adverse effects on soft tissues and growing bone in children having combined radiation therapy and chemotherapy, Melvin Tefft, Sloan-Kettering; discussion leader, Ralph Johnson, NCI.

General Topics—role of the clinical pharmacologist, Thomas Hall, Univ. of Southern California; statistical problems in detecting late consequences of therapy, D.J. Finney, Univ. of Edinburgh; discussion leader, Henri Tagnon, Institut Jules Bordet, Brussels.

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 and 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-CN-55192-03

Title: *Establishing personnel requirements in cancer control*
Deadline: *Probably late February*

The Div. of Cancer Control & Rehabilitation of NCI is soliciting proposals for a project to establish personnel requirements in cancer control. This procurement is directed towards estimating the types and numbers of professional personnel that are currently working in the fields of cancer prevention, detection, diagnosis, treatment, and rehabilitation.

The categories of personnel include, among others, cytotechnologists, mammography technicians, chemotherapists, radiotherapists, oncology nurses, as examples.

The other goal of this procurement is to provide estimates, within the time constraints of the contract, of the current and five-year projected needs for such personnel. The estimates of what is presently available shall be made from published and unpublished reports and will not require the collection of primary data. The report of this contract will assist the DCCR in planning professional education programs.

Contracting Officer: Hugh E. Mahanes
Control & Rehabilitation
301-427-7984

RFP NCI-CM-53768

Title: *Preparation of bulk chemicals and drugs*
Deadline: *About Feb. 14*

The Drug Development Branch, Div. of Cancer Treatment, NCI, is seeking organizations having capabilities, resources and facilities for the preparation of bulk chemicals and drugs. The objective of this project is the preparation by synthesis or by extraction and isolation from natural sources of quantities of bulk chemicals and drugs (1 gram to multikilograms) for use as potential anticancer agents.

The major emphasis will be on the preparation of the desired material in multikilogram scale and will involve resynthesis and scale-up from the chemical literature. Methods will be available for small scale runs in many, but not all, instances.

Process development for scale-up will be required. The facilities must have the capacity for performing all types of chemical synthesis, including access to pilot plant equipment (minimum of a 200 gallon glass lined ractor required). All products must be completely assayed as to identity and purity.

A well instrumented analysis laboratory and adequate library facilities must be available. The principal investigator must be trained in organic chemistry, preferably at the Ph.D. level or equivalent from an accredited school, and have extensive experience in chemical synthesis and process development.

The principal investigator must be named and all technical personnel must be assigned to the project a minimum of 50% of the time, preferably 100% of the time.

It is anticipated that the total project will require a minimum of eight (8) technical manyears of effort per year. The government will consider multiple awards of either 4 technical man-years each or a lone

award of 8 technical man-years. The proposal may be at either or both levels of effort and should clearly indicate the level(s) being proposed. The number of awards to be made and the level of effort of each will be at the discretion of the government.

Contract Specialist: S.R. Gane
Cancer Treatment
301-427-7463

RFP NO1-CN-55211-03

Title: *Evaluation of early detection of carcinoma of the cervix by cytological screening*
Deadline: *About Feb. 15*

The Div. of Cancer Control & Rehabilitation of NCI is soliciting proposals for a project to develop a means of measuring the effect of a well-run pap screening program on the incidence and mortality of invasive cervical cancer in a community setting over a suitable period of time. A comparison will be made to incidence and mortality of invasive disease in a comparable population having access to whatever screening procedures are normally available to them to determine if a well-controlled screening program has a greater impact on the incidence and mortality of invasive cervical cancer.

RFP NO1-CN-55214-08

Title: *Psychological aspects of breast cancer*
Deadline: *About Feb. 15*

The Div. of Cancer Control & Rehabilitation is soliciting proposals for a project to study the psychological aspects of breast cancer upon the patient and the patient's family.

The primary objectives of this procurement are:

(1) To identify the most significant psychological aspects of breast cancer which affect the life of the patient and her family.

(2) To implement a demonstration program wherein these significant psychological factors can be addressed across all aspects of cancer management in order to provide the most comprehensive kind of cancer control.

RFP NO1-CN-55216-01

Title: *Measurement of the cost of cancer care*
Deadline: *About Feb. 15*

The Div. of Cancer Control & Rehabilitation is soliciting proposals for a project to design appropriate instruments and collect the necessary data so that the direct costs of treating cancer of selected organ sites can be determined.

RFP NO1-CN-55213-08

Title: *Design task for surveys of patient attitudes and knowledge about cancer control and rehabilitation*
Deadline: *About Feb. 15*

The Div. of Cancer Control & Rehabilitation is soliciting proposals for a project to design the instruments for a national survey of the civilian population and a separate national survey of the cancer population by selected cancer sites.

It is not expected that the contractor will go beyond commonly accepted survey techniques and standard instrumentation concepts in the survey design. However, the contractor will be expected to make at an early point in the task work, an explicit formulation of how the collected information will relate to policy questions and to identify the probable extent to which any important subset of recognized policy questions in cancer control and rehabilitation will not be illuminated by the proposed surveys. Actual conduct of the surveys will not be a part of this contract.

Contracting officer for the four preceding RFPs: Hugh E. Mahanes Jr.
Control & Rehabilitation
301-427-7984

RFP NO1-CP-55646-62

Title: *Chemical repository*
Deadline: *Feb. 14, 1975*

The primary goal of NCI is to prevent cancer in humans. One of the contributory means of achieving this goal is through studies to determine ways of interfering with or inhibiting the metabolism and/or mechanism of action by which environmental chemicals exert their carcinogenic effects. Information derived from such studies intends to lead ultimately to the development of measures to prevent cancer in humans.

In contrast to the research grants program of NIH, in which support is given to investigators for work on projects that they themselves have initiated, the carcinogenesis program is a structured one, with an overall plan and goals, intermediate goals, and systematic approaches to solve problems identified by investigators in the field. Under this type of program, RFPs are issued in accordance with the overall plan and are directed toward the resolution of specific problems of high priority. Responses to the RFP, therefore, must:

(1) Offer approaches which could lead to the answers being sought.

(2) Demonstrate a capability of performing that approach being proposed.

(3) Indicate a commitment on the part of the investigator and his institution that they wish to participate in this program, to share to the fullest extent possible in offering guidance in the direction the program should go, and to inform the program, through its project office and progress reports, the significant results obtained which could alter the priorities of contract-supported research.

This is not intended to imply, however, that the

carcinogenesis program would not be receptive to new ideas submitted in the form of an unsolicited proposal summary or letter of intent and would not consider their potential contribution to the overall significance of the program.

The carcinogenesis program is attempting to meet a resource need of the carcinogenesis research community by providing well characterized reference chemicals. Many of the compounds, other than those used in the screening program, either are not available through other sources or are purified and characterized reference standards prepared from commercially available materials. Since many of the compounds included in this program are carcinogens, potential carcinogens, or radiolabeled substances, a central repository and distrubition center is necessary to insure safe handling and storage of these compounds including their shipment in the safest possible way. The goal of this competition is the establishment of such a repository and distribution center.

A storage area (repository) and an analytical support laboratory are required. It would be desirable to have purification and synthetic laboratory capabilities available but it is not an absolute requirement. The facilities devoted to this program must comply with the OSHA regulations for handling hazardous materials from the time the chemical is received to the time it is shipped.

The repository area must be able to handle chemicals which are received in a variety of package sizes, to subdivide these materials into package sizes appropriate to meet researcher needs, and must be able to provide storage areas at room temperature, 5 degrees C. and −20 degrees C. It is estimated that ultimately 150 chemicals will be stored for the screening program, which requires about 100 lbs. of each chemical. Compounds should be coming into the repository at a rate of five per month for this program. Deletions will not be significant in the next two years.

The Carcinogenesis Reference Compound Bank currently contains about 70 chemicals and will be expanded considerably, possibly to 500 compounds over the next five years, at a rate of about 5-10 compounds per month. These chemicals are in small quantities and in smaller packages, ranging from a few milligrams to 50 grams. Most of the compounds are solids or liquids with a small number of gases. Some of the liquids are volatile. The expected ratios of solids, liquids, volatile liquids and gases are 50:35:10:5.

An area must also be available where chemicals are received, inventoried, packaged for shipment, and logged out of the facility. Shipments out of the repository will run about 25-50 per month. It is hoped that the above information will enable the responder to estimate the space requirements for the repository.

Duties of the repository include:

1. Maintaining an inventory system including an alerting system to determine when certain chemicals should be restocked.
2. Open shipments received and enter into inventory system.
3. Mix bulk chemicals and repack into small containers of convenient size.
4. Removal of aliquots from chemicals received for chemical characterization.
5. Long term storage of chemicals.
6. Package chemicals in a manner suitable for shipping.
7. Ship chemicals to users.
8. Sufficient documentation should be shipped with the materials to provide the user with adequate information to insure safe handling in his laboratory environment.

The analytical support laboratory is expected to perform chemical characterization studies on compounds received and periodic quality control analysis where indicated. It is assumed that such measurements might include melting points, boiling points, refractive index, ultra violet and infrared specoscopy, thin layer chromatography, gas-liquid chromatography and liquid chromatography.

If facilities for all or any part of the operation are not immediately available, please discuss the time relationship of events which occur between the time of contract award and full implementation of the repository activities.

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

RFP NO1-CP-55647-62

Title: *Development of colonies of aged rats*
Deadline: *Feb. 14, 1975*

Within cancer research, an emphasis has usually been placed upon the younger animal for carcinogenesis studies. Not only is the cost considerably less than for an aged group, but ample evidence exists to show that in many experimentally inducible cancers, the susceptibility to carcinogenesis is markedly increased as the age at carcinogen administration is reduced. In many cases, prenatal administration is the most effective protocol.

This concept, however, may not necessarily be the most useful for generating animal models of human disease. Rapid development of cancer in animals is useful for accomplishing certain tasks, but it may not provide all the information necessary to derive the understanding required to identify the cellular steps responsible for the induction of neoplasms. As an example, Ebbesen (Science *183:* 217, 1974) recently reported a higher incidence of DMBA-induced skin carcinogenesis in animals grafted with target tissue from aged syngeneic hosts.

The need for old animals has been similarly emphasized by two considerations relevent to prostate carcinogenesis studies. It is recognized that prostate carcinoma is principally a phenomenon of old age.

Latent or non-proliferative carcinomas are found in younger men, but considering that the change from latent to active carcinomas and the incidence of prostate cancer increase with age, the aging process or just time itself is in most cases a necessary prerequisite for expression of the disease. Until more is known about this aging process with respect to the prostate, little success is predicted in an attempt to induce prostatic cancer or elucidate mechanisms of tumorigenesis.

Data has recently been presented within the carcinogenesis program demonstrating a significant reduction in androgen binding sites in the ventral prostate of the rat as the animal ages. An oxidative shift in metabolism of testrosterone similarly occurs during the aging process. These observations support the need to generate a supply of older animals for research purposes. This RFP addresses specifically the generation of such rat colonies.

The carcinogenesis program has assumed the obligation of developing colonies of rats which shall specifically be allowed to mature under acceptable concepts of what is commonly considered a "barrier system", since long term survival is desired. Animals will be made available to investigators through the project officer for research in cancer. Such animals may be useful for studies other than prostate carcinogenesis, but the principal effort is for the study of induction of cancer in this male reproductive organ.

Male rats will be bred as described below and housed by appropriate means for developing mature animals. The specific aspects to be considered in developing a proposal include:

1. Rat strain. The ACI/N (AxC) Irish inbred strain and the NIH Sprague-Dawley outbred stock will be bred and housed.

2. Source of initial stock. Initially, germ-free genetically defined animals of the strain and stock above will be provided by the NIH. Approximately 2-3 pedigreed litters of ACI and approximately 10 litters of Sprague-Dawleys will be shipped to the contractor.

3. Housing requirements. The NIH germ-free animals must be entered into germ-free isolators and maintained as such. This will represent a breeding focus for entry of offspring into the second stage of associated flora isolators. These latter isolators will ultimately provide offspring for the holding, "barrier" facilities. These rooms must be designed to provide a clean environment for aging of these males (only) entered into this facility.

Within the "barrier" system, a maximum of 750 animals per room shall be maintained, and thus a minimum of 3 rooms will ultimately be needed. No other animals and no other activity other than that defined in C4 below should be permitted in these rooms.

4. Virgins and breeders. It is desired to have available aged male rats of each strain in which are a) virgins, having never been in contact with a female after weaning, and b) retired breeders which have experienced sexual activity at the highest frequency feasible. Matings of the males should take place in the "barrier" facility, but mated females should be removed and sacrificed or otherwise disposed of as soon as possible. The government is not interested at this time in maintaining females in the "barrier" system. The mated females and their offspring will be the property of the government. However, sale of these will be encouraged with a negotiated credit being applied to the invoices submitted.

5. Rate of colony expansion. As soon as is practical, male rats of each strain should be entered into the "barrier" facilities at the rate of approximately 150 per month for six months and 75 per month thereafter. Currently it is anticipated that a maximum of 2000 rats of each strain will be maintained, with approximate equal levels of virgins and breeders comprising this maximum level. As program need is further defined, the rate of colony expansion may alter upon renegotiation.

6. Genetic replenishment. The ACI strain in the germ-free isolators shall be maintained by brother x sister matings. The Sprague-Dawley stock shall be propagated by a systematic randomization mating procedure approved by the project officer. Pedigreed germ-free litters of both the strain and stock will be supplied by NIH at intervals not less than one year in order to restart the strain or to enlarge the gene pool of the stock.

7. Distribution. Male animals will be housed until death, obvious disease or authorization by the project officer or his designee to distribute animals using either his own vehicles or common carriers as most suitable. Directions given will be exact as to strain, age, numbers, virgins or breeders, and destination. Animals will be shipped in approved filtered containers. Consignee will be notified prior to shipment of anticipated date, time and place of arrival.

8. Surveillance. At the direction of the project officer, numbers of retired breeders and/or mature aged males in the "barrier" colony will be shipped to designated laboratories for serologic, bacteriologic and genetic determinations.

9. Timed-specifications. Animals must be identified as to the week in which they were born. Breeders must, in addition, be identified as to frequency of matings and the age at the last mating. The specific numbers of matings for each male animal should be as frequent as possible and must be precisely known. Confirmed pregnancy is required to assure known sexual activity.

10. Carcinogenesis bioassay data system (CBDS). Under current evaluation is the value of incorporated certain data from these colonies into the CBDS, operated by the Carcinogenesis Area of the NCI. A decision will be made prior to any contract negotiation. This should not influence technical or business proposal preparation for response to this RFP.

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

RFP NCI-CM-53844-18

Title: *Therapy of patients with large bowel carcinoma*

Deadline: *Feb. 20, 1975*

NCI's Div. of Cancer Treatment will make available to interested institutions an RFP to conduct clinical trials of intensive, multidisciplinary therapy of patients with resectable or locally unresectable large bowel carcinoma, and to determine the efficacy of a number of therapeutic approaches, any possible relationship to the morphological type and clinical stage of the disease, and the influence of any concomitant pathology.

A limited number of contracts is envisioned. It is contemplated that the scope of each of these contracts will require the treatment of at least 50 evaluable patients per year, including patients with curative resections and patients with unresectable but localized disease, by a full and available competent staff, consisting of surgeons, radiotherapists, medical oncologists/chemotherapists, immunologists and pathologists.

The team must be willing to include immunologic testing into the protocols. The work will require that each of these staff members shall be free and willing to cooperate fully with one another, as well as with their colleagues at other participating institutions. It is also contemplated that detailed research plans will be developed cooperatively by representatives of the NCI staff and the participating institutions.

Contract Specialist: Michael M. Del-Colle
Cancer Treatment
301-427-7466

RFP NCI-CB-53916-31

Title: *Melanoma cell vaccine and in vitro assays for humoral and cellular cytotoxicity*

Deadline: *Feb. 7, 1975*

Contracting Officer: Harold P. Simpson
Biology & Diagnosis
301-486-5565

CONTRACT AWARDS

Title: Assembly and distribution of committee books.
Contractor: Small Business Administration, $136,124.

Title: Procurement of embryonic cell lines with variable growth rates.
Contractor: Litton Bionetics, $185,619.

Title: Award of two tasks involving construction, alteration and renovation at the Frederick Cancer Research Center.
Contractor: Litton Bionetics, $408,774.

Title: Production and distribution of CANCER THERAPY ABSTRACTS, VOLUMES 16 and 17.
Contractor: The Franklin Institute, Philadelphia, $298,449.

Title: Development of a National Cancer Program project analysis model.
Contractor: TRW Systems Group, $93,033.

Title: Chemotherapy studies in patients with breast cancer.
Contractor: New York State Dept. of Health/Health Research Inc., $214,434.

SOLE SOURCE

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

Title: Conferences on laboratory animal resources.
Contractor: National Academy of Sciences.

Title: Breeding, maintenance and in vivo studies of carcinogenic activity of primates.
Contractor: Litton Bionetics.

Title: Support services for the application of animal virus model system to human neoplasia.
Contractor: Litton Bionetics.

Title: Studies of modulating factors in respiratory carcinogenesis.
Contractor: IIT Research Institute.

Title: Large-scale tissue culture virus production for cancer research.
Contractor: Pfizer, Inc.

Title: Organ culture assay of Vitamin A analogs.
Contractor: Southern Research Institute.

Title: Virological studies of breast cancer.
Contractor: Pfizer, Inc.

Title: Inelastic laser light scattering studies on nucleic acids, nucleoproteins, and viruses.
Contractor: Michigan Cancer Foundation.

Title: Support services to maintain studies of spontaneous and virus induced neoplastic transformation.
Contractor: Meloy Laboratories.

Title: Applications of advanced electrical and optical technology to problems in oncology.
Contractor: General Electric Co.

The Cancer Letter –*Editor* JERRY D. BOYD

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