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RESEARCH EDUCATION CONTROL

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PARTICLE THERAPY PROGRAM WOULD COST $500 MILLION OVER 10 YEARS FOR 16 FACILITIES, CLINICAL TRIALS

The National Cancer Advisory Board, after hearing a presentation last January on the prospects for improved cancer treatment through the use of particle radiotherapy, asked the proponents of particle radiation research to come back with some detailed cost estimates.

The answer the Board received at its November meeting on the total cost of the proposed increase in research and development was close to

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In Brief

SCHMIDT ADVISES UPTON TO CONSIDER MOVING CONTROL PROJECTS IN OTHER DIVISIONS TO DCCR

NCI DIRECTOR Arthur Upton was asked by Cancer Panel Chairman Benno Schmidt for a report at the January meeting of the National Cancer Advisory Board on how cancer control funds are being spent. Schmidt asked Upton to scrutinize the entire NCI budget for projects in other divisions that might be considered control programs, with the suggestion that they might be transferred to the Div. of Cancer Control & Rehabilitation, to relieve financial pressures on the other divisions. That suggestion assumes that control efforts (if there are any) now being supported by the other divisions are more worthy of continued support than those DCCR already has under way or planned. . . . **HUGH DAVIS**, who as acting chief of the Clinical Investigations Branch is the NCI staff member supervising the Clinical Cooperative Group Program, will return to the Univ. of Wisconsin at the end of this month. Davis had accepted the job with the understanding it would only be for two years, actually stayed two and a half. NCI is trying to recruit someone as permanent chief of the branch. . . . **"COMBINED EFFECTS** of Chemotherapy and Radiotherapy on Normal Tissue Tolerance" is the title of the Thirteenth Annual San Francisco Cancer Symposium sponsored by the West Coast Cancer Foundation. It will be held March 3-4 in the Hyatt Regency Hotel. Contact Jerome Vaeth or Judith Kohn, WCCF, 50 Francisco St., Suite 200, San Francisco 94133, phone 415-981-4590. . . . **EORTC SYMPOSIUM** in Brussels April 26-29 will go into "Controversies in Cancer Treatment." Abstracts must be submitted by Feb. 15. Write to M. Staquet, EORTC Data Center, Institut Jules Bordet, rue Heger-Bordet 1, 1000 Bruxelles. . . . **MRS. ANWAR SADAT**, wife of the Egyptian president, is president of that country's equivalent of the American Cancer Society. John Ziegler of NCI and F. Kash Mostofi of the Armed Forces Institute of Pathology who is an ex-officio member of the National Cancer Advisory Board, attended the recent annual meeting of the Egyptian organization. The Egyptians approved a resolution calling for a ban on cigarette advertising. The following day the government banned cigarette advertising.

NCI WILL CONSIDER PROPOSAL FOR NEW RESEARCH PROGRAM IN PARTICLE THERAPY

(Continued from page 1)

the estimate the proponents had offered in January—nearly $500 million, over a 10 year period. Improvement in radiotherapy that money would buy would result in increasing the number of Americans who are cured of cancer by at least 50,000 a year, the proponents said.

Simon Kramer, Thomas Jefferson Univ.; Malcolm Bagshaw, Stanford Univ.; and J. Robert Stewart, Univ. of Utah, assisted by NCAB member William Powers, Missouri Cancer Programs, told the Board that "it is now time for the transfer of technology from the laboratory to hospital based facilities in order to carry out detailed clinical trials" to evaluate the effectiveness of particle therapy in local and regional control of cancer.

"The scientific rationale for particle therapy compared to standard radiation," the report submitted to the Board noted, "consists of either or both (a) an enhanced biological effect of these radiations due mainly to increased relative biological effectiveness and reduced significance of hypoxic tumor cells, and (b) physical properties of these particles leading to marked improvement in dose distributions to the tumor."

"Only limited clinical trials (in particle therapy) have been possible utilizing the existing accelerators which were designed and mainly used for basic physics research. They are located in areas remote from clincal facilities needed for the care of cancer patients and housed in physics laboratories in surroundings not suitable for routine handling of large numbers of ill people.

"The data accrued strongly support the rationale and the clinical data from the U.S. and England are encouraging," the report continued. "It is now time for the transfer of technology from the laboratory to hospital based facilities in order to carry out detailed clinical trials to evaluate the effectiveness of these radiations on the control of local-regional cancer. The importance of this aspect of cancer care is illustrated by the nearly 100,000 deaths yearly due to our current failure by all means of therapy to control cancer in its primary and regional sites. Improved results will also enhance the probability of cure in those cancers in which distant metastases show promise of yielding to systemic adjuvant therapy."

The report presented cost estimates for each of the four particles—neutrons, protons, heavy ions and pions. Within one to two years additional neutron facilities (two are already in existence) would be established. Two facilities would be established for each of the other particles, under the proposal.

The major cost, $242.8 million, would be for hospital based equipment and facilities. Operational costs would total $147.8 million. These estimates include escalation for inflation during the phased implementation of the program.

Physics and engineering support would be needed, particularly for the heavy ions and pions. The proposal also provides for supporting research in physics and radiobiology essential to the safe and effective application of these beams in cancer treatment.

The 16 facilities, operating for an average of about six years during the 10 year program, would treat an estimated 20,000 patients, of whom approximately 50% would enter randomized clinical trials.

Here is how the cost estimates were broken down:

Equipment and Facilities

Neutron therapy	$61.2 million
Proton therapy	36.5
Heavy Ion therapy	74.3
Pion therapy	70.8
Total	**$242.8 million**

Operational Costs

Neutrons (8 new)	$44.2 million
Existing	28.5
Protons	28.3
Heavy Ions	31.4
Total	**$147.8 million**

Supporting Research

(Includes dosimetry and treatment palnning, delivery and collimation, patient support and treatment reproducibility, radiation safety, biologic verification of dosimetry, optimization of time, dose fractionation; late effects, and carcinogenesis)

Neutrons	$6.25 million
Protons	3.5
Heavy Ions	15.5
Pions	16.5
Total	**$41.75 million**

Randomized clinical trials, with 10,000 patients at a cost of $3,500 each, would total $35 million. Registry cases, antoehr 10,000 at $200 each, would cost $2 million.

Program management would cost $9.9 million, the report said. Total cost of the entire project over 10 years: $479.25 million.

NCI currently supports particle therapy research with about $12 million, and the Energy Research & Development Administration adds another $3 million. The very limited clinical trials that have been carried out with existing equipment in the U.S. and England with neutrons indicate that remarkable improvements in survival and in bodily function may be possible (***The Cancer Letter,*** Feb. 11).

Benno Schmidt, chairman of the President's Cancer Panel, asked Kramer for his estimate "of the order of magnitude of improvement you're looking for" with particle therapy.

"For neutron therapy, we would expect a 2½-3 fold increase in cured patients," Kramer replied. There is little clinical evidence to show what protons,

heavy ions and pions can do "but they should work at least as well as neutrons," Kramer said.

Board Chairman Jonathan Rhoads suggested and the Board agreed that NCI Director Arthur Upton appoint a committee of staff members and some members of the Board to consider the proposal and report back at a future meeting.

Powers insisted that the program "would not be developed in competition for funds with existing programs." Rhoads pointed out that "you will have to take this to the Hill" (Congress) to obtain additional appropriations.

"Let's don't kid ourselves," Schmidt said. "It can't be non-competitive. You can ask Congress for a special appropriation but they would still consider it as competing with other programs for the money."

Board member Frederick Seitz suggested that it might be possible to handle an adequate number of patients in clinical trials with just one medically dedicated pion machine. Board member Harold Amos agreed. "Why 10 nuetron facilities and two each of the others? Why not one of each, until you see which ones are better?" Amos asked.

"The problem with just one machine is that you can't get enough patients through in time to do prospectively randomized trials," Bagshaw said.

"Why are you betting heavier on neutrons?" Schmidt asked.

"Machines are available now. It's the fastest way to get into randomized clinical trials," Bagshaw said.

Board member David Hogness asked about particle research in other countries. Bagshaw said there are two pion machines going into medical use, in Vancouver and in Switzerland. "The Swiss are building on our technology. They will have an American designed pion machine before we do."

Kramer acknowledged that "this is clearly an expensive program." But in addition to the potential offered by particle therapy for saving lives, and "to providing a better quality of life by doing less damage to the patient," Kramer came up with some figures which support the process as cost effective.

The medical cost of curing cancer patients averages $12,000; the cost of treating patients who die of the disease is $36,000, Kramer said. For each cancer patient that is cured, the saving averages $24,000. Curing an additional 50,000 patients a year would save the U.S. $1.2 billion in medical costs. That does not include other costs, such as lost wages, that are estimated to run as high as $15 to 20 billion a year attributable to cancer.

The radiologists presented statistics and a number of tables derived from existing radiotherapy efforts which support their case for particle therapy. Much of the data came from the "patterns of care" study supported by the Div. of Cancer Control & Rehabilitation.

In 1974, there were 665,000 new cases of cancer in the U.S.; half of them were treated with radiation at some time in the course of their disease. There were 1,074 full time radiotherapists.

Improved radiation therapy increased five year survival, from 1955 to 1970, by the following percentages, the radiologists said:

Cervix, 30% to 60%; nasopharynx, 20% to 40%; bladder, 5% to 25%; tonsil, 25% to 45%; oral cavity, 30% to 50%; Hodgkin's disease, 30% to 75%.

"These results derive partly from improved case finding but mainly from improved treatment," they said.

Combined modality therapy, including radiation therapy, increased five year survival of children with Wilm's tumor from 20% in 1950 to 80% in 1970; and rhabdosarcoma from 20% in 1950 to 50% in 1970. With childhood leukemia, 50% died within six weeks in 1950; in 1970, 50% lived three or more years.

Potential candidates for particle radiation therapy would be drawm largely from those with head, neck, brain, GI, gynecological, genital, urinary, lung, skin, bone, and breast cancer and with lymphomas. The deaths resulting from those cancers are due largely to local failure, which effective radiotherapy prevents. Most of the patients who die from those cancers are not now considered for present day radiotherapy because of either poor response or normal tissue damage. "With particle therapy, these two detriments to successful treatment will no longer be as significant," the radiologists said.

Deaths in 1977 in those categories, and deaths due to local failure, were estimated at:

H&N&brain–20,600 deaths, 12,890 local failure; GI–78,000, 32,910; Gyn–21,700, 12,940; GU–29,900, 17,030; lung–89,000, 7,960; skin, bone–5,100, 2,300; lymphoma–21,900, 2,650; breast, 34,000, 4.725.

BEEFED-UP NCAB CENTERS SUBCOMMITTEE TO MEET DEC. 19-20 ON CORE GUIDELINES

The National Cancer Advisory Board Subcommittee on Centers, beefed up with seven consultants to broaden its representation, will consider again the issues involved in the proposal to change the guidelines for cancer center core grants at a meeting Dec. 19-20 in Bethesda.

The first day of the meeting will be held in Building 31 on the NIH campus, conference room 10. On Dec. 20, it will be in the Landow Building, in downtown Bethesda, conference room C418. It will start at 9 a.m. both days, and the entire meeting is open.

Consultants who have agreed to serve on the subcommittee are David Baltimore, Nobel laureate from MIT; Michael Brennan, director of the Michigan Cancer Foundation; Stephen Carter, director of the Northern California Cancer Program; Lowell Orbison, dean of the Univ. of Rochester School of Medicine; Albert Owens Jr., director of the Johns Hopkins Oncology Center; and Sidney Weinhouse, professor emeritus, Dept. of Biochemistry, Fels Research Institute.

The primary issue the subcommittee will take up will be the proposal drafted by NCI Centers Program staff last September to phase out support for staff investigators' salaries and shared resources from core grants. Those costs would have to be borne through other sources and mechanisms—the institutions, or grants and contracts.

The money thus saved—eventually an estimated 40% of core grant funds (now close to $60 million a year)—would be transferred by the Div. of Cancer Research Resources & Centers to traditional research grants and program project grants. Some also would be retained for distribution through core grants to developmental support—young investigators or scientists with new ideas who need seed money until they can get their own grants.

The Board approved the plan "in principle" in September, but then backed down last month in the face of fierce opposition from center directors, expressed at their meeting in Memphis (***The Cancer Letter,*** Nov. 11).

NCI Director Arthur Upton had told the center directors that he would consider establishing a new advisory committee for the Centers Program, not just to work on the core grants and budget problems, but to provide a continuing evaluation of the total program.

The difficulties of getting a new committee chartered encouraged NCI to use the existing NCAB subcommittee, with the additional consultants. William Shingleton, director of the Duke Univ. Comprehensive Cancer Center, is chairman of the subcommittee. Other Board members are David Hogness, professor of biochemistry at Stanford Univ.; Mary Lasker, president of the Albert & Mary Lasker Foundation; Thomas Newcomb, director of Research & Development for the Veterans Administration Dept. of Medicine & Surgery; Joseph Ogura, head of the Dept. of Otolarynogology at Washington Univ.; Gilbert Omenn, assistant director for human resources in the White House Office of Science & Technology; Henry Pitot, director of the McArdle Laboratory for Cancer Research; Frederick Seitz, president of Rockefeller Univ.; and Jonathan Rhoads, NCAB chairman.

The subcommittee will attempt to develop a consensus, for presentation to the Board at its January meeting. Best guess now on what that recommendation will be: Be flexible, permitting reviewers considerable latitude in recommending which salaries and shared resources can be paid out of core, which should be charged back to grants.

An even more crucial issue, perhaps, will be what to do when the money runs out—establish a priority cutoff, phasing out grants for some existing centers while maintaining others at close to recommended levels? Or reduce funds for everyone to spread them out farther?

The Assn. of American Cancer Institutes, which includes in its membership most of the 64 centers with NCI core grants, adopted a policy statement which supports the first alternative:

"We should not ignore peer review program and budget recommendations in centers of highest merit in order to continue support for centers of lowest merit," the AACI statement said.

AACI also took a position that could be considered statesmanlike, even courageous, considering the possible effect on some of its members:

"We should not fund renewal applications for center grant support when new applications of higher merit cannot be funded."

In other words, existing centers should be dropped to make room for new ones if the existing ones can't compete.

The AACI statement had other recommendations:

"Traditional grants, program projects and core grants are, and should be, complementary, not competitive. The budget increases so necessary to each must not come at the expense of one of the others. These grants are interdependent. They support work of the highest priority to the National Cancer Program and the maintenance of their complementary relationship is essential for the continued effectiveness of productive cancer centers. Therefore we recommend that program review by external scientists should focus on the objectives of the National Cancer Program and, of necessity, should cross existing divisional lines within NCI."

AACI asked that the committee advising on cancer centers should be charged not only with evaluation of core grant guidelines but also with "development of recommendations to enhance the utilization of cancer centers as a resource to all NCI divisions in achieving their goals within the National Cancer Program."

CONSTRUCTION IN FY 1978: REQUESTS HIT $44 MILLION; $10 MILLION AVAILABLE

The NCI budget for the current, 1978, fiscal year includes $12 million for construction grants, to be available through competitive award. The competition this year will be extremely intense.

The National Cancer Advisory Board already has approved award of two grants out of 1978 funds, totaling over $2.2 million. These included the final part of the grant to Georgetown Univ., $947,000, to complete its award of $3 million approved but not completely funded with 1977 money; and $1.3 million to the Fred Hutchinson Cancer Research Center.

The Hutchinson award was paid early to take advantage of an opportunity to save $150,000. Ordinarily, current year awards are not paid until after the May Board meeting, but this involved an ongoing project in which the contractor has equipment on site. A delay would have resulted in re-startup costs.

The Board has approved two other grants but not

yet recommended them for funding—$1.2 million to Northwestern Univ., and $1.1 million to the Univ. of Wisconsin. Five additional new applications will go to the Board in January, requesting a total of $16.6 million. And 23 more will go to the Board in May, asking a total of $25 million.

The Northwestern and Wisconsin grants will have to compete with any of those 28 which may be approved in January and May for funding with the remaining 1978 funds. That could total $44 million in requested funds, competing for about $10 million. The requested levels probably will be trimmed substantially, and it is not likely that all will be approved. Some undoubtedly will be carried over to FY 1979 for funding.

The unusually large number of applications was stimulated by the fact that this was the last opportunity to seek funding under the old 75-25 matching formula, with NCI providing the 75%. Applications received by last Oct. 1 can be considered for that formula; from now on, it will be 50-50.

NCI is still accepting applications that request more than $4 million. After Feb. 1, no more requests exceeding that amount will be considered.

The problem of completing the award of an $11.9 million construction grant to the Univ. of Southern California has not yet been resolved. This grant was awarded several years ago to the USC/Los Angeles County Comprehensive Cancer Center. However, the Board of Supervisors reneged on providing the county's portion of the matching funds. The university submitted a new proposal which eliminated most of the patient care facilities; it was reviewed and approved by most of the members of the original reviewing committee, and the NCAB gave its approval.

The grant originally was awarded as a joint venture to the university and county, and there is no precedent for transferring a grant already awarded to another institution. U.S. Comptroller General Elmer Staats is studying the matter, and an opinion is expected soon.

MAGNUSON DUE TO HEAD APPROPRIATIONS COMMITTEE WITH DEATH OF McCLELLAN

Warren Magnuson, one of the best friends the Cancer Program has had in Congress, will assume an even more powerful position in the Senate with the death of Sen. John McClellan.

The Arkansas Democrat was chairman of the Senate Appropriations Committee. Magnuson, the second ranking Democrat on the committee, probably will be the new chairman. Committee chairmen are no longer automatically named on the basis of seniority; they must be elected by the Democratic caucus, then the full Senate. No opposition to Magnuson is expected, however.

Magnuson has been chairman of the Appropriation Committee's Subcommittee on Labor & HEW, where he has played a major role in providing funds for the Cancer Program. He could continue as chairman of the subcommittee. If he does not, the next in line in seniority on the subcommittee are Robert Byrd, William Proxmire, Ernest Hollings, Thomas Eagleton, Birch Bayh, and Quentin Burdick. All but Burdick head other Appropriations subcommittees, and Byrd is the Senate majority leader.

Of that group, only Proxmire is an out and out foe of the Cancer Program. He is chairman of the Subcommittee on Housing & Urban Development and Independent Agencies. A Proxmire aide told ***The Cancer Letter*** "it is premature" to discuss whether or not the senator would attempt to change subcommittees.

If Proxmire did take over Labor-HEW, it wouldn't help the Cancer Program but it also would not be the disaster it would be if Magnuson were not the parent committee chairman. Proxmire, who voted against the National Cancer Act and has argued against increased NCI appropriations, could make it difficult for Cancer Program advocates during hearings on money bills. But when it comes down to establishing a final figure for cancer spending in the sessions of the full committee, Magnuson and his allies still will have the power on their side. In fact, the new lineup should be even more favorable.

McClellan, who was 81 when he died Monday, was a conservative whose resistance Magnuson had to overcome in attempts to increase appropriations for health programs over House and Administration figures. McClellan also did not offer any help in fighting off efforts to trim health dollars when appropriations bills were debated on the Senate floor.

As chairman of what is probably the most powerful committee in the Senate, Magnuson will be tougher than ever to oppose.

HIGGINS INSISTS VA GROUPS DO UNDERGO REVIEW; IT'S AD HOC REVIEW, NCI SAYS

NCI's Div. of Cancer Treatment, on the advice of its Board of Scientific Counselors, has threatened to cut off funds supporting the two Veterans Administration cooperative groups—the VA Surgical Adjuvant Group, headed by George Higgins, and the VA Lung Group, chaired by Julius Wolf (***The Cancer Letter***, Nov. 4).

NCI objects to what it says is inadequate review of the two groups, especially compared with the review that all other cooperative groups go through.

Higgins insisted that he has never objected to review. In a memo to Thomas Newcomb, VA assistant chief medical director for R & D, Higgins said, "For the record, I would like to point out that activities of the cooperative group studies in cancer conducted under the interagency agreement between NCI and VA have been reviewed periodically over the past years. The more current of these reviews

were as follows:

"July 9, 1973—An in-depth review of all the cooperative group activities reviewed by an ad hoc committee under the chairmanship of Dr. Kenneth Krabbenhoft.

"April 7, 1975—The VA Lung Group and lung cancer protocols of VASAG were subjected to a review by the DCT Board of Scientific Counselors as a part of the review of the entire DCT lung cancer program.

"December 14, 1976—Statistical program review under chairmanship of Dr. Thomas Chalmers.

"February 16, 1976—The Central Institutional Review Board for VA-NCI intramural cancer groups under the chairmanship of Mrs. Anne C. Anastasio, conducted an in-depth review of the programs of the cooperative groups. Although the entire program of each group was reviewed, the emphasis was primarily on compliance with human studies directives.

"In view of these reviews, it is difficult to understand serious criticism that the VA Cooperative Groups have been unwilling to submit to review. Having participated actively in the laborious task of preparing voluminous reports and appearing before these review boards, I am probably more impressed by these reviews than critics who are uninformed. As you well know, both Dr. Wolf and myself have never indicated any reluctance to submit to additional review of group activities which might be dictated through joint interaction by the responsible officials of the two agencies."

"It's easy to take shots at those who are working on the tough tumors," commented Hugh Davis, who will leave soon as acting chief of DCT's Clinical Investigations Branch. "The VA groups have done unspectacular but steady work. But the Board of Scientific Counselors feels that the ad hoc, irregular review of the VA groups is not as strict or as difficult as that performed by the CCIRC (Cancer Clinical Investigation Review Committee) for the other groups. The Board feels there is a need for a mechanism, a formal committee, to review the VA groups annually or at other suitable intervals."

COST OF PURCHASING ALL CANCERGRAMS ON STANDING ORDER NOW $840 A YEAR

The National Technical Information Service, an agency of the Dept. of Commerce which handles publication and distribution of Cancergrams for NCI, has clarified how the "current awareness service" is offered to those who do not receive them automatically (and at no cost).

A previous report (*The Cancer Letter*, Sept. 23) indicated that all Cancergrams could be purchased from NTIS for a total of about $72 a year. That was grossly understated.

Each of the three Cancer Information Dissemination & Analysis Centers (CIDACs) compiles monthly collections of abstracts from recently published literature in their assigned fields. The Diagnosis & Therapy CIDAC at M.D. Anderson produces one Cancergram monthly for each of 12 titles, or subject areas. The Carcinogenesis CIDAC at Stanford Research Institute, has nine titles, and the Virology, Immunology & Biology CIDAC at Franklin Institute has 14 titles. SRI and Franklin also produce one Cancergram monthly for each title.

Each of the monthly Cancergrams for each title sells for $2 if purchased on a standing order basis from NTIS (for North American addresses, $3 for elsewhere). They may be purchased individually for $3 a copy.

Thus, purchasing all Cancergrams for all present titles would cost $840 a year, on a standing order basis. Within a year, the CIDACs are expected to double the number of titles.

For order forms, write to NTIS, Subscription Section, 5285 Port Royal Rd., Springfield, Va. 22161.

Cancergram titles presently available:

Clinical Cancergrams

Childhood Solid Tumors & Lymphomas
Clinical Evaluation and Treatment of Multiple Myeloma & Other Monoclonal Gammopathies
Detection, Diagnosis, Therapy & Preclinical Biology of Breast Cancer
Detection, Diagnosis & Therapy of Colorectal Cancers
Detection, Diagnosis & Therapy of Lung Cancer
Diagnosis & Treatment of Acute and Chronic Leukemia
Diagnosis & Treatment of Hodgkin's Disease
Diagnosis & Treatment of Non-Hodgkin's Lymphomas
Diagnosis & Treatment of Sarcomas and Related Tumors
Immunotherapy & Clinical Cancer Immunology
Neoplasia of the Head & Neck
Nuclear Medicine in Cancer Diagnosis & Management

Carcinogenesis Cancergrams

Activation & Metabolism of Carcinogens
Carcinogenicity of Azo Dyes, Aryl Amines, & Related Compounds
Carcinogenicity of Nitroso Compounds
Dietary Aspects of Carcinogenesis
Etiology of Cancer in the General Population
Gastrointestinal Carcinogenesis
Carcinogenicity of Polycyclic Aromatic Hydrocarbons & Related Compounds
Radiation Carcinogenesis
Role of Synthetic & Natural Hormones in Carcinogenesis

Viral Oncology Cancergrams

Antigens Associated with Cancer Related Viruses
Avian Tumor Viruses
DNA Tumor Viruses in Nonprimate Systems
RNA Viruses Associated with Cancer (excluding studies in avian & primate systems)
Virus Studies in Humans & Other Primates

Cancer Immunology Cancergrams
Oncofetal Proteins
The Major Histocompatibility Complex
Tumor Antibodies
Tumor Associated Antigens
Cancer Biology Cancergrams
Cyclic Nucleotides and Cancer
Cytogenetics & Cancer
Regulation of Cell Kinetics In Vitro and In Vivo
Steroid Hormones in Cancer Related Biology
Structural & Functional Aspects of Cell Membranes

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, citing the RFP number. Some listings will show the phone number of the Contract Specialist, who will respond to questions. Listings identify the respective sections of the Research Contracts Branch which are issuing the RFPs. Their addresses, all followed by NIH, Bethesda, Md. 20014, are:
Biology & Diagnosis Section — Landow Building
Viral Oncology & Field Studies Section — Landow Building
Control & Rehabilitation Section — Blair Building
Carcinogenesis Section — Blair Building
Treatment Section — Blair Building
Office of the Director Section — Blair Building
Deadline date shown for each listing is the final day for receipt of the completed proposal unless otherwise indicated.

SOURCES SOUGHT

RFP NCI-CO-85411-25

Title: *Programming services in support of the National Cancer Institute's contract management system*
Deadline: *Approximately Dec. 16 for submission of statement of qualifications (Actual deadline is 14 days from publication in "Commerce Business Daily")*

Sources are being solicited to provide programming, data analysis, and other related data processing services in support of the NCI contract management system. This support will consist of:

1) Assisting in the operation and maintenance of all contract management system programs, systems and subsystems; 2) modification and execution of monthly recurring report programs; 3) modification development, testing, and execution of report programs to meet scheduled and unscheduled requests for information and for use in production processing; 4) assisting in coordination and dissemination of information, documentation and program changes necessary to maintain contract management system interface with various subsystems, management information system, components and external systems, e.g., Div. of Cancer Treatment, IMPAC, Div. of Financial Management; 5) maintaining and updating all systems documentation and users guides for all operational systems and subsystems of the contract management system; 6) assisting contract management system staff in reducing heavy backlogs in the data entry and file maintenance areas of the contract management system; and performing other tasks as required for training, documentation, status reporting.

Organizations who wish to submit capability statements of their qualifications and experience must possess a thorough knowledge of automated procurements management systems, as well as hands on experience with the IBM 370/165 computer environment, OS JCL, WYLBUR (text editor), and MVS. Expertise in the use of Inquiry and Reporting System (IRS) and Cobol programming languages is mandatory. All contract management system report programs are written in the IRS language, update programs and file maintenance programs are written in Cobol.

It is anticipated that the great majority of programs to be written and systems to be documented will require a thorough knowledge of the IRS language and programming techniques as they relate to the NIH Hardware environment described above. Interested offerors shall submit statement of capabilities necessary to perform this project.

It should be noted that this service has been furnished by a contractor for several years. Also, any RFP issued as a result of this sources sought announcement will provide additional data detailing the contract management system.

Organizations are invited to submit capability statements of their qualifications and experience. The statements should not exceed 10 pages exclusive of covering letter, staff resumes and tabular presentation of experience.

Contract Specialist: Helen Best
Office of Director
301-427-7984

RFP NCI-CM-87183

Title: *Analysis of chemicals and pharmaceutical formulations*
Deadline: *Approximately Jan. 16*

NCI is interested in organizations having facilities and capabilities for the analysis of experimental medicinal chemicals, natural products, and their pharmaceutical formulations.

The facility must have the capability to: (1) analyze and identify bulk chemicals and dosage formulations; (2) develop analytical procedures for the analysis of new compounds; (3) determine the purity of a material; (4) determine the concentration of the ingredients in a dosage formulation; (5) characterize materials as to their chemical and physical properties including solubilities, stability, pKa, and other information useful for formulation and administration of the material.

The organization should have the inhouse facilities and personnel capable of performing and interpreting a wide variety of analytical determinations. Examples of such determinations are as follows: (1)

chromotography – paper, thin-layer, column, gas, high pressure liquid; (2) spectroscopy – ultraviolet, visible, infrared, nuclear magnetic resonance, mass spectra; (3) electrochemical – pH, pKa, potentiometric, amperometric, coulometric, non-acueous, polarography; (4) melting range; differential scanning calorimetry; optical rotation; refractive index; (5) other procedures as required for analysis.

It is anticipated that two contracts will be awarded, one for a four technical man-year effort and one for a 10 technical man-year effort with a five-year period of performance.

Contracting Officer: John Palmieri
Cancer Treatment
301-427-8125

RFP NO1-CP-85603-62

Title: *Hairless mice for UV carcinogenesis studies*
Deadline: *Jan. 16*

NCI's Carcinogenesis Program is interested in (1) to determine the response to UV irradiation of five to 15 mouse strains bearing mutations leading to the hairless (hr/hr) phenotype or other epidermal abnormalities; (2) to determine their immunological competence; and (3) to define, histologically, the nature of the induced lesions. The results will be used to select strains for production for a central source of animals of known genetic constitution and biological responsiveness.

The government estimates that approximately three professional man-years of effort for three years is required for this project.

Contract Specialist: Dorothy Britton
Carcinogenesis
301-427-7914

RFP NCI-CM-87194

Title: *Support services for extramural clinical trials*
Deadline: *Jan. 15*

Monitoring, coordination, preparing and maintaining materials and reports, and serving as organizational center for disease-oriented cancer clinical research contract groups and unaffiliated contractors.

The contractor selected shall provide administrative support, manage organization, coordination, preparation and communication of materials, and provide assistance in protocol design. The contractor shall carry out randomization procedures for the clinical trials, working in coordination with statistical support as well as with the clinical research contractors. The contractor shall monitor drug requests and maintain records, and obtain copies of patient records as requested for reference for chairmen/-principal investigators. The contractor shall prepare progress and annual reports and agenda and minutes of meetings for distribution to the investigators and to NCI.

The contractor must work closely with the project officer, meeting with him/her a minimum of every two weeks, and on request, at NCI.

The contractor must have extensive experience in the area of services for support for cancer clinical trials and substantial experience in working with related task forces, cooperative groups, and projects involved in similar research.

It is anticipated that an incrementally funded contract will be awarded for a period of three years. The level of effort will be six technical man-years of effort per year.

Contract Specialist: John Thiessen
Cancer Treatment
301-427-8125

CONTRACT AWARDS

Title: Pharmacology and tumor bank, continuation
Contractor: Arthur D. Little Inc., $305,528.

Title: Protocol toxicology prime contractor, renewal
Contractor: Battelle Memorial Institute, Columbus Laboratories, $7,337,230, (three years).

Title: Preclinical canine bone marrow transplantation
Contractor: Hazleton Laboratories America, $838,061 (three years).

Title: Procurement of human hematopoietic tissue culture cell lines, continuation
Contractor: Associated Biomedic Systems Inc., $62,555.

Title: Therapy of patients with colorectal cancer
Contractor: Univ. of Pittsburgh, $600,000.

Title: Molecular hybridization with RNA of high specific activity, continuation
Contractor: Sloan-Kettering Institute, $72,366.

SOLE SOURCE NEGOTIATIONS

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

Title: Study of common antigens in MuMTV, human milk and breast tumors
Contractor: Institute for Medical Research, Camden, N.J.

Title: Fibrinolysis as a parameter of in vitro transformation
Contractor: Children's Hospital of Los Angeles.

The Cancer Letter –*Editor* JERRY D. BOYD

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