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JOB DISCRIMINATION SURVEY COMPLETED, BUT NCI STILL TRYING TO INTERPRET IT; PAYMENTS MAY BE HELD UP

The results of a million dollar series of contracts awarded by NCI to determine if U.S. employers discriminate against cancer patients and former patients are in, but no one can quite figure out what they mean. The Div. of Cancer Control & Rehabilitation has told the contractors to provide better interpretation of their data or they won't receive the final payments on their contracts.

Three of the five contractors concluded that job discrimination does not exist—that is, employers did not refuse to hire cancer patients and former patients or to offer them the same opportunities for advancement enjoyed by other employees. One contractor reported there was evidence of discrimination, and the fifth concluded that there may be some discrimination but it did not appear to be widespread.

The contractors were University Research Corp., Washington, D.C.; Human Resources Research Organization, Alexandria, Va.; Westinghouse Health Systems, Columbia, Md.; American Institute for Research, Pittsburgh; and Applied Management Sciences, Silver Spring, Md.

Each was assigned an HEW region to survey. According to Lawrence

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In Brief

LAWSUIT DEVELOPING OVER NCI X-RAY CONTRACT; CALIFANO MAY ATTEMPT TO TRIM NCI AUTHORITY

LEGAL FLAP is brewing over a contract NCI awarded in 1975 to American Science & Engineering Inc. of Cambridge, Mass. for development of a computerized transaxial x-ray reconstruction. At least one company which lost out on the million dollar contract has its lawyers working up a case. There is also a question involving two patents developed under the contract. . . . **BILL AUTHORIZING** one-year extension of biomedical research programs including the National Cancer Act has been signed into law. Congress will take up a three-year extension of the Cancer Act this fall or early next year. Look for attempts by HEW Secretary Joseph Califano to cut back NCI's authority, take away its independent budget development and perhaps eliminate the President's Cancer Panel—all key provisions of the National Cancer Act of 1971. The one-year extension authorized $1.26 billion for NCI for FY 1978, an empty gesture of sorts since Congress already had approved an appropriation of $867 million. The extension also increased the number of expert consultants NCI can hire from 100 to 151 (the National Cancer Advisory Board had asked for 200). Ignored was NCAB's request to permit NCI to distribute test chemicals to non-government scientists other than NCI grantees or contractors. The Act gives NCI authority to make available biological agents but neglected to mention chemicals. Congress declined to correct the oversight, indicating this was an item that would be considered for the next extension.

FIVE CONTRACTORS DIVIDED ON QUESTION OF CANCER PATIENT JOB DISCRIMINATION

(Continued from page 1)

Burke, DCCR program director for rehabilitation who was project officer for the survey, said all five used the same questionnaire and had agreed on the same approaches and source of patient samples. But when the results came in and the data were pooled, enough questions were raised about sampling methodology to make nearly impossible the job of interpreting the reports.

"Their approach left much to be desired," Burke told ***The Cancer Letter.*** "There are discrepancies on how they got data. We cannot find justification for their conclusions."

A statistician is in the process of looking at all the data cards supplied by the contractors and asking them to explain discrepancies and sampling techniques. "We need to know what each contractor did that accounts for discrepancies, and to make sure that all cards have uniform data," Burke said.

An example of an inconsistency would be how each contractor, or each interviewer, handled a refusal to answer, Burke said. "Some may have considered it to mean a negative answer, some may have dropped that employer and replaced him with another one, and some may have just not done anything about it. They were all different."

The five contracts were to have been performed in three phases. The survey was the first phase. If a significant amount of discrimination were found, the contractors then were to move into the second phase which involved design and initiation of "action programs"—educational efforts aimed at modifying employer attitude and encouraging them not to discriminate against cancer victims. The third phase would be an evaluation of the entire program.

The first phase is costing a little more than $1 million, and the additional phases would cost another $1-1.4 million if implemented.

"That job discrimination survey is typical of how Cancer Control is throwing away NCI's money," one cancer center director complained recently when he found many of his programs drastically curtailed by the budget crunch. "Hell, I could have told them that discrimination does exist. It doesn't take a million bucks to find that out. ACS could have told them about it, there are laws against discrimination, and we don't need to spend our limited money enforcing them. That's someone else's job."

Burke answers:

"NCI isn't going to be in the position of indicting, wholesale, employers without solid evidence. If there is discrimination, perhaps it may be limited to certain kinds of employers, or to certain industries.

"There has been no national survey, offering objective evidence of discrimination. The American Cancer Society California Division did some survey, but it wasn't national in scope," Burke said.

There is a federal law, called the Catastrophic Illness Act, which theoretically prohibits employers from discriminating against persons with serious ailments, provided they are capable of performing their jobs. But there are no penalties for noncompliance, and DCCR—backed by the peer review group which approved the contract proposals—felt that education and persuasion was the only practical remedy.

A publication called *Texas Business* reported in its August issue on job discrimination against cancer patients. Several case studies were cited in which hiring and promotion discrimination were claimed, and a number of persons around the country involved with the problem were quoted. All supported the thesis that job discrimination against cancer patients does exist, it is widespread, and it occurs despite lack of evidence that cancer victims can't do their jobs as well as anyone else.

The article said that Frances Feldman, the Univ. of Southern California professor who conducted the survey for ACS-California, found that job discrimination against able, capable, qualified cancer patients is a serious problem nationally. Interviewing cancer patients, she found that 17% either had lost their jobs or were not recommended for new positions because of their disease. At least half reported some sort of discrimination, not all job loss related. Some felt an attitude change toward them by coworkers, some believed their promotion prospects had been affected, and some said they were excluded from group insurance.

The Texas article criticized NCI for "asking a thousand employers if they automatically eliminated cancer patients as possibilities, even when fully qualified. What did they expect an employer to say: Oh, hell yes, of course."

Burke said the questionnaire was better designed than that. It asked for factual information about hiring practices—health questions prospective employees were required to answer, number of cancer patients on the payroll, etc. Cancer patients were interviewed as a cross check.

The article referred to the NCI survey and quoted Burke about the problems (some of the quotes were out of context, Burke said). One quote:

"On Aug. 31 I'm going to release some kind of statement. I'm either going to say that there is job discrimination against cancer patients, that there is no job discrimination against cancer patients, or that we funded five studies for a million dollars but don't know what the studies mean."

"Those statements don't reflect accurately what I intended to convey," Burke told ***The Cancer Letter.*** "I did say that at this point we do not have an accurate interpretation of the data."

The statistician's work should be completed by the end of the month, Burke said.

NURSE ONCOLOGISTS: MORE NEEDED, WORKING ON GUIDELINES FOR CARE

The Oncology Nursing Society, with over 800 members, may be the fastest growing organization in the cancer treatment field. Only four years old, ONS held its second annual meeting last spring with 400 nurses attending sessions on nursing management in cancer treatment, models for oncology nursing service, nutrition, education and research, and standards of oncology nursing.

Lisa Marina, president of the society, said the organization has two major projects for this year—development of guidelines for nursing care, and formation of local chapters around the country. Marino is executive director of the National Surgical Adjuvant Breast Project, headquartered at the Univ. of Pittsburgh.

Other officers of the society are Cindi Mantz, vice president, surgical nurse oncologist at Washington Univ., St. Louis; Daryl Maas, secretary, oncology nurse supervisor at New York Univ.; Connie Henke, treasurer, nurse coordinator for the comprehensive cancer center at the Univ. of Alabama; and directors Susan Groenwald, instructor at the College of Nursing at Rush Univ.; Tish Knobf, nurse clinician in the Yale Univ. Section on Medical Oncology; and Joan Piemme, assistant professor at Georgetown Univ. School of Nursing.

In an information discussion with ***The Cancer Letter***, Marino, Mantz, Maas and Henke touched on the needs of their profession and the contributions nurse oncologists can make in the care of cancer patients:

—The most pressing need is for more nurse oncologists. The growth of the Cancer Program has led to the proliferation of jobs that could be filled by nurses, if there were enough of them. Graduate level training and continuing education opportunities are badly needed. NCI's Div. of Cancer Control & Rehabilitation has helped establish nurse training programs, but a proposal to support masters programs has been shelved, at least for another year.

—Guidelines for care will be built around helping patients regain functional levels—problems the nurse has to approach to help them achieve that.

—If nurses take over certain chores usually performed by physicians (as advocated by many to relieve physicians of routine tasks), what training will be required?

—The job of a nurse oncologist is not just task oriented—it's total involvement, following the patient from beginning to end. "We're the patient's support system. We're working with patients to help them live."

—The most difficult task nurse oncologists have to perform is to work with a dying patient and then turn around and be cheerful with a new patient. "It increases your sensitivity to life."

—A major nursing responsibility is working with patients involved in clinical research. They see to it that the patient is fully informed about the treatment and risks and to reinforce them continually. "We have to let them know what the alternatives are, including no treatment at all. It is important for the patient to participate in treatment decisions."

Following are abstracts of selected papers presented at the ONS annual meeting:

MODEL FOR THE ONCOLOGY NURSING SERVICE – Marion Smith, Barbara Butler, Columbia Presbyterian Medical Center

The formulation of a philosophy of nursing care and objectives stemming from this philosophy provide the model for health care delivery to cancer patients in the research unit at Columbia-Presbyterian Medical Center. The oncology nursing division, staff nurses as well as supervisory personnel, met in several brainstorming sessions to design this model with one collaborative voice. The key to its effectiveness for patient care lies in the autonomous role it assigns to each nurse in the planning of and accountability for her primary patients, promoting satisfactions for the nurse and high standards of oncological nursing. This model resulted in patients assuming an active role in decision making, an atmosphere of open communication, a focus on patient strengths rather than limitations, and valued family support systems. The success of this model has been recognized and applauded by patients, family, and health care professionals alike.

Support systems designed for the staff nurse include a shared philosophy with colleagues, congruence of expectations and objectives with medical staff, weekly psychiatric consultations, and close working relationships with social service. The foundation for these support systems comes from a dynamic process of nursing supervision which fosters the autonomous role of the nurse by facilitating and recognizing the individual nurse's achievements with her patients. In this collaborative process staff nurses are encouraged in their efforts, assisted in mobilizing resources and have the opportunity to engage in ongoing evaluation with learned nursing professionals.

This model maximizes nursing's contributions to patient care. It defines with one voice the nurses' position and rationale for care delivered, provides ease in orienting new nurses to the purposes of the unit, and presents a unified philosophy to physicians, other health care disciplines and the public in the matters concerning patient care.

RADICAL HEAD & NECK SURGERY: OUR REACTIONS – Debbie Trulock, Medical College of Georgia

As nurses, we are in a unique position to support a patient's decision to undergo aggressive control of a head and neck cancer. To do so, we must be aware of our feelings about such therapy, i.e., total laryngectomy, neck dissection, maxillectomy, and realize that negative reactions can easily be conveyed to the patient.

The quality of a patient's existence once a cancer is diagnosed must be considered. Alterations in body image created by surgery require a great deal of coping, adjustment, and adaptation with regards to the "new" self. It is indeed possible for a patient's life postoperatively to be one of good quality.

One of my responsibilities as oncology clinical specialist is to serve as a role model demonstrating acceptance of the patient as a whole person regardless of any defect(s). Being involved with a patient as he learns to care for himself and watching him reach the goals set are most rewarding experiences.

The way we feel about cancer and its treatment must be positive and we should attempt to dispel misconceptions held by nurses, physicians, and the general public.

NURSING ASSESSMENT OF LOCAL AND SYSTEMIC REACTIONS TO BCG IMMUNOTHERAPY BY THE TINE TECHNIQUE – Rose Mary Carrol, UCLA

One of the requirements for any adjuvant therapy is that it be acceptable to the patient with regard to frequency, ease of application and side effects. In the UCLA Surgical Oncology Clinic, we have found that the oncology nurse specialist plays a major role in making BCG immunotherapy acceptable to our cancer patients. In a clinical setting

where the patient may see several doctors during his course of treatment, our oncology nurses have been selected to evaluate the physical and personal impact of BCG immunotherapy on a continuing basis. The clinical staff has developed an assessment form in order to chart the most subtle physiologic and associated psychologic reactions of the cancer patient who undergoes BCG immunotherapy by the tine technique.

The patient under treatment by the multipuncture tine method is usually seen every two weeks for a two year period. An evaluation of skin changes at the site of the 5 treatment areas, both axillas, both groins, and the site of the primary lesion, as well as reactions of the patient to a changing body image, varying side effects, and his ability to carry on daily activities serve to keep the physician aware of treatment effects. The assessment supplies a quantification of systemic and local reactions to immunotherapy that provides information for treatment of future patients and the part such treatment will play in their lives.

As BCG immunotherapy becomes more commonly used in the clinic setting, accurate assessments of the physical and psychological implications will be crucial. Our assessment form is offered as one method for accumulating the data necessary to offer quality medical and nursing care to the cancer patient who undergoes BCG immunotherapy.

RATIONALE FOR AND LONG TERM CARE OF INDWELLING ARTERIAL INFUSION SYSTEMS – Beverly Hobbs, Sally Ness, Peter Jochimsen, Univ. of Iowa

Direct cannulation of the arterial supply to tumors and tumor beds, for the purpose of delivering high dose chemotherapy, has both theoretical and practical advantages. This technique and care of the systems involved requires not only surgical expertise, but also nurse oncology personnel who can teach such skills as prevention of sepsis, maintenance of patency, and the minimization of other complications. These skills appear to be directly related to improved results. Proper initial care, patient teaching, and the instruction of concerned relatives add to the overall impact of this modality in terms of palliation and improved longevity.

At the Univ. of Iowa Hospitals and Clinics, arterial infusion of chemotherapeutic agents in patients with head and neck cancer or extremity malignancies has been used frequently when other forms of tumor irradication have failed. Moreover, the management and survival rate of persons with hepatic metastasis has been improved when treated by ligation of the hepatic arterial supply and distal cannulation.

Clearly, since the best palliation is that which the patient experiences in his own familiar surroundings with his family, the oncology nurse plays a key role in facilitation of patient and family understanding of the procedure, thereby maximizing its effectiveness.

NURSING MANAGEMENT OF THE ONCOLOGY PATIENT EXPERIENCING THE EFFECTS OF ABDOMINAL IRRADIATION – Margaret Hansen, Rush Presbyterian St. Luke's Medical Center

The side effects of abdominal radiation therapy which the oncology patient experiences are often devastating to his psychological well being and create physical problems that are seemingly far beyond his control. The objective os this research study was to determine if the feeling of a lack of control was unavoidable; or if a sense of integrity could be maintained within the person by using a behavioral and physiologically based model of nursing care.

Data concerning the patterns of the side effects (in particular, stress, diarrhea, and cramping) was collected and nursing approaches were formulated to reduce the disruptive effects, restore a sense of integrity, control, and active participation in therapy.

At the onset of therapy, each person was placed on a high-calorie, high-protein, low-residue, low-fiber diet in order to reduce mechanical and chemical irritation to the denuded mucosa of the intestine, thereby reducing the frequency of diarrhea. Second, each person was instructed to exercise moderately (i.e., a moderate walk) for at least 30 minutes after each meal in order to divert splanchnic blood flow, thereby decreasing motility and allowing further time for absorption of nutrients. Third, subjects in the study became involved in planning and evaluating their care by keeping a daily log of side effects, activities, diet, and personal feelings during this time.

Of the 10 subjects included in the initial study, the nursing interventions proved to reduce observable signs of stress and to restore a sense of personal integrity of all cases; and with six persons to markedly decrease diarrhea and cramping.

THE ROLE OF THE INFECTION CONTROL NURSE IN ONCOLOGY – Mary Brouillet, Stephen Schimpff, Peter Wiernik, and Viola Young, Baltimore Cancer Research Center

In an oncology unit, infections are common and often fatal. Seventy-five percent of the patients with acute myelocytic leukemia die of infection, but of more importance, 30% used to die of infection before the first course of chemotherapy had been completed. Measures for infection prevention are therefore essential. The Infection Control Nurse (ICN), working as part of a team, plays a significant role accomplishing the goal of infection prevention.

The ICN, by daily surveillance of infections and microbiology, documents the sites, types, pathogens, and predisposing factors of infections; calculates the rates of infections for the cancer unit and the tumor types; and recognizes outbreaks and general trends of infections. This information becomes the basis for establishing and evaluating preventive measures.

The BCRC's preventive program works through education and supervision by the ICN of patients and staff on a continuing personal and group basis. Although infection prevention techniques are aimed at all patients, the emphasis is on high risk granulocytopenic patients. Oral nonabsorbable antibiotics (including evaluation to establish the most tolerable and efficacious regimen); reverse isolation; dental hygiene; housekeeping procedures and patient hygiene are emphasized, as is the banning of urinary and intravenous catheters. The ICN also has responsibility for direct isolation of patients with resistant or highly communicable pathogens.

With the program outlined, infectious deaths prior to completing the first course of chemotherapy in AML are rare. The overall incidence of infections at the BCRC is decreased. The patients, particularly those who are granulocytopenic, and staff have a better appreciation of their role in infection prevention. We therefore believe that a complete program of infection prevention is essential at all cancer centers and that an ICN can serve as the focal point of that program.

APPROACHES TO IMMUNOTHERAPY FOR PATIENTS WITH OSTEOGENIC SARCOMA IN AN "OUTREACH" PROGRAM – Claudia Seipp, NCI

In June, 1975, a protocol for the treatment of patients with osteogenic sarcoma was initiated by the Surgery Branch, NCI. After definitive surgical resection, the patients were prospectively randomized to receive either high dose methotrexate with citrovorum rescue or to receive identical chemotherapy with the addition of BCG immunotherapy. This non-specific immune stimulation with BCG was to be administered intradermally by the Heaf gun technique. To date, 26 patients have been randomized to this protocol. Eleven patients have been randomized to receive BCG immunotherapy each week for two weeks out of each three weeks, for 26 treatment cycles.

Because 10 of the 11 patients lived greater than 150 miles from NCI and BCG injections were required weekly between the methotrexate infusions, we sought more convenient "resources" for the patients to receive their immunotherapy. It was felt that interested family members or nurses in the patients' own community could be effectively taught the Heaf gun injection technique by the oncology nurse specialist for the NCI Surgery Branch.

This method of administration was instituted in the treatment of all 10 patients. Three nurses in the referring offices of four of our patients were oriented to this treatment as well as four mothers of young teenagers and other members in the families of two young adult patients. Thus far, 380 doses of BCG have been administered properly. In five of the 10 patients, dosage levels of BCG have been altered and more difficult diluent techniques have been successfully introduced.

This outreach program for these 10 patients has been an effective method for our patients to receive immunotherapy and yet continue to have some normalcy in their societal relationships during the 1½ years of adjuvant therapy.

INVESTIGATION OF METHADONE ALONE VS. METHADONE WITH CNS STIMULANTS IN PROVIDING PAIN RELIEF IN CANCER PATIENTS – Amy Valentine, Univ. of Rochester Cancer Center

A double-blind study is presently under way at the Univ. of Rochester Cancer Center to investigate achieving pain relief in cancer patients, using a modification of Bromptom's solution.

Chronic intractable pain that is unrelieved by conventional narcotic administration is not only intolerable for the patient but frustrating for the medical profession. In this study, 30 cancer patients who receive no relief of pain from all oral agents up to and including hydromorphone, excluding morphine and methadone, will be randomized to receive methadone alone, Val-Steck I Elixir (consisting of methadone, cocaine, alcohol and flavoring syrup) or Val-Steck Elixir II (consisting of methadone, dextroamphetamine, alcohol and flavoring syrup). The purposes of the study are to investigate achieving pain relief in cancer patients using an oral medication and the effect of two central nervous system stimulants to potentiate the action of narcotic analgesics. Pain assessments using the McGill-Melzack Pain Questionnaire and the Univ. of Rochester Pain Questionnaire will be used to assess the patient's pain status before beginning the drugs and will be repeated at 24 hours, 48 hours and 1 week after receiving the drugs.

Val-Steck Elixir has been used at Strong Memorial Hospital for the past four months with great success. The data from this current investigation should be complete by April 1977. This research project has several important implications:

1. When proven, these drugs will provide a pain free existence without undue sedation improving the patient's quality of life. Val-Steck Elixir is an oral agent that can be easily titrated to provide maximum pain relief.

2. It will provide for nurses a pain assessment form, shown to be effective in evaluating a patient's response to pain, pre- and post-medication.

3. It is an example where an oncology nurse clinician can undertake clinical research in collaboration with a pharmacist and physician in pharmacology to provide pain relief for cancer patients.

4. This study provides for beginning nursing researchers a model for a controlled investigation utilizing patient consent.

THE CLINICAL SPECIALIST IN RADIATION ONCOLOGY FOCUS ON THE TEACHING-CONSULTATIVE FUNCTION – Laura Hilderly, Rhode Island Hospital

The role of the clinical specialist has been designed to encompass a variety of functions including clinical practice, education, research, consultation and administration. It is the purpose of this report to examine and redefine the functions of educator and consultant in a newly expanded department of radiation oncology.

The Dept. of Radiation Oncology at Rhode Island Hospital was expanded and restructured in 1973 as a medical school affiliated, broadly based community resource. It was apparent from the outset that the nursing role within the department would have to be widened and a position for clinical specialist was identified.

Having entered the position with a broad background as a medical-surgical nurse, and as a nursing educator, it became necessary for me to delineate my own functions and areas of concern. Initially, the major focus had to be on acquiring in-depth understanding of the discipline of radiation therapy, its place as a treatment modality in oncology, and most importantly, to gain an understanding of the cancer patient and his needs.

When a solid knowledge base had been established, I then began the process of developing the role of the clinical specialist. Gradually, a pattern began to emerge upon which the role was modeled.

Two of the most important functions are those of educator and consultant. Radiation therapy is relatively unknown and often misunderstood by members of the medical and nursing professions as well as the public. If we are to give truly comprehensive nursing care, then an understanding of radiation therapy as part of the oncology patient's management must be acquired. One of my major goals, therefore, was to develop an educational program for nursing personnel; and to establish my position as a nursing consultant in oncology patient care.

NURSING CARE IN A LAMINAR AIRFLOW UNIT WITH MINIMAL PERSONNEL – Debbie Arzonico

During the past three years nursing care has been given in a laminar airflow isolator unit devoted exclusively to the care of acute leukemia patients in a large municipal hospital. An average of six isolators have been in operation during this period with a total of 160 admissions involving 98 patients with ages ranging from 18 months to 76 years. The feasibility of running a unit of this nature with a nursing staff of eight nurses, five aides and a small number of part-time employees has been demonstrated to be effective.

The 3x3 meter hard-walled isolators provide a protected environment for the granulocytopenic patients. All surfaces are carefully disinfected by bactericidal detergents, a procedure carried out by one or two nursing personnel over a three-day period in which 12 hours are utilized for cleaning purposes. Sterile food and water are provided. Bacteriological monitoring of each patient and his isolator is carried out on admission and at least weekly thereafter to monitor proper isolation procedures and provide ongoing information about the patient's endogenous flora.

Nurse aides have been successfully taught several important patient-care functions using sterile technique due to the minimal number of nurses available. Psychological problems have not been noted even though physical contact with isolator patients is minimal. Close nurse and aide interaction with patient and family is discussed. With the infection mortality rate less than 10%, details of providing this effective reserve isolation with limited professional people are presented for discussion.

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 – 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 noted.

RFP 210-77-0156-0000

Title: *Carcinogenicity of antimony and thallium*
Deadline: *Approximately Sept. 20*

The National Institute for Occupational Safety & Health is soliciting proposals from organizations interested in determining by 12-month inhalation exposures in animals the carcinogenicity of thallic oxide ($T1_2O_3$), an antimony ore concentrate and antimony trioxide (Sb_2O_3).

National Institute for Occupational Safety & Health
5600 Fishers Ln.
Rockville, Md. 20857
Room 1-58 Attn: M. Stitely

RFP NCI-CB-84233-39

Title: *The development of methods and procedures to test the effectiveness of screening for early endometrial cancers by means of uterine sampling, and in turn, its effectiveness in reducing mortality among the women studied*

Deadline: *Oct. 21*

NCI is interested in establishing a contract with organizations having the capabilities to test the effectiveness of screening for early endometrial cancer by means of uterine sampling, and in turn, ets effectiveness in reducing mortality among the women studied.

RFP NCI-CB-84232-39

Title: *The improvement and evaluation of imaging capabilities in the detection of early pancreatic cancer*

Deadline: *Oct. 21*

NCI is interested in establishing a contract with organizations having the capabilities to improve and evaluate imaging capabilities in the detection of early pancreatic cancer and thereby increase the survival rate and extend the survival time of patients with this disease.

Contract Specialist for the above 2 RFPs: Thompkins Weaver
Biology & Diagnosis
301-496-5565

RFP NCI-CB-84236-35

Title: *Development of contrast agents for use in clinical ultrasonic diagnosis*

Deadline: *Oct. 21*

NCI is interested in establishing a contract with organizations having the capabilities to develop and test substances which will enhance tumor detectability with ultrasound, and to improve the capability of ultrasound in the imaging of small tumors through the use of appropriate contrast agents.

RFP NCI-CB-84235-35

Title: *Reconstruction algorithms for dose reduction in x-ray computed tomogrphy*

Deadline: *Oct. 21*

NCI is interested in establishing a contract with organizations having the capabilities to develop and demonstrate the clinical feasibility of appropriate algorithms for producing satisfactory computed x-ray tomography at significantly lower radiation dosages than those currently required.

RFP NCI-CB-84234-35

Title: *Methodology using contrast agents to improve detection of small liver metastases with computerized x-ray tomography*

Deadline: *Oct. 21*

NCI is interested in establishing a contract with organizations having the capabilities for developing and clinically testing the necessary methodology for improved detection of liver metastases with computerized x-ray tomography using contrast.

Contracting Officer for the above three RFPs: H.P. Simpson
Biology & Diagnosis
301-496-5565

CONTRACT AWARDS

Title: Conduct an EPA/NCI special skin cancer epidemiology study

Contractors: Michigan Cancer Foundation, $87,190; Fred Hutchinson Cancer Research Center, $74,842; and Univ. of New Mexico, $55,785.

Title: Development of virus cancer test systems, continuation

Contractor: Pfizer, $85,000.

Title: Prototype clinical chemotherapy program in cancer control, renewal

Contractors: Cornell Univ. Medical College, $294,875; and Mt. Sinai School of Medicine, $299,727.

Title: Incorporation of 11 alteration/renovation projects as necessary for the performance of the cancer research program being conducted at the Frederick Cancer Research Center

Contractor: Litton Bionetics, $199,448.

Title: Prototype Network Demonstration Project in Breast Cancer, renewals

Contractors: New England Medical Center Hospital, $324,386; Institute for Cancer Research, $320,847; Oklahoma Medical Research Foundation, $290,736; Albany Medical College of Union Univ., $346,806; Dartmouth College, $346,877; Wilmington Medical Center, $276,072; and Georgia Cancer Management Network, $256,608.

Title: Research on isolation of xenotropic viruses, continuation

Contractor: Univ. of California (San Francisco), $119,470.

Title: Biomedical computing software services in support of clinical and diagnostic trials, continuation

Contractor: Information Management Services Inc., $46,337.

Title: Lung cancer control – Detection and therapy – Phase II, continuation

Contractor: Johns Hopkins Univ., $928,154.

—*Editor* JERRY D. BOYD

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