

THE

CANCER

RESEARCH
EDUCATION
CONTROL

LETTER

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

Vol 2 No. 35

Aug. 27, 1976

© Copyright 1976
The Cancer Letter, Inc.

Subscription \$100 per year

NCI, ACS AGREE ON INTERIM MAMMOGRAPHY GUIDES DROPPING ROUTINE USE FOR WOMEN UNDER AGE 50

NCI has sent out its "prudent . . . interim" guidelines for mammography to the 27 Breast Cancer Detection Demonstration Projects it supports jointly with the American Cancer Society, recommending
(Continued to page 2)

In Brief

163 PIs HOLD BOTH CONTRACTS, GRANTS; HOPKINS SCIENTISTS QUESTION RETROSPECTIVE DIET STUDIES

THERE ARE approximately 2,600 principal investigators who are recipients of NCI research contracts and/or grants. Many are listed as PIs for more than one grant, or for more than one contract, but only 163 are involved with both contracts and grants. Thomas King, director of the Div. of Cancer Research Resources & Centers, told the President's Cancer Panel that the 163 hold 186 contracts and 211 grants. Panel Chairman Benno Schmidt pointed out that in many cases, institute directors will be listed as the PI for several contracts and/or grants but that individual scientists under them do the work, "one on a contract, another on a grant. But how many scientists are at work under both? Do we have a mechanism to assure that doesn't happen?" Schmidt asked. NCI Director Frank Rauscher said, "We think so. I don't think it's possible for one man to be paid out of two pots for one job". . . .

ALAN CRANSTON, California senator who last year led the unsuccessful attempt to strip \$100 million from NCI appropriations and redistribute it to other NIH institutes, supported the appropriations bill which came out of committee this year without trying again to cut back on cancer funds. "However," Cranston said, "I believe that the appropriation of such substantial funds for cancer research and, to a lesser degree, for heart and lung research is and has been at the expense of more adequate support for research in other areas, especially basic biomedical research. I am relieved that the committee has increased appropriations for the other institutes"

JAMES WALLACE, who took a year's leave of absence from Roswell Park to head the Treatment, Rehabilitation and Continuing Care Branch of NCI's Div. of Cancer Control & Rehabilitation, has returned to RP as director of cancer control. . . .

STUDIES SHOWING relationships of food consumption to gastric cancer were challenged by three Johns Hopkins scientists in a letter to the editor of the *Journal of the National Cancer Institute*. The three - David Lilienfeld, Cedric Garagliano and Abraham Lilienfeld - said that the retrospective studies have not paid sufficient attention to the unreliability of an individual's memory of dietary habits over a period of years. "This may introduce a major bias in the inferences derived from these studies," they said. They suggested that epidemiologists "may be better advised to conduct long term prospective studies . . . with large population groups."

Frederick RFP
Available Oct. 22;
Three, Four May
Challenge L-B
. . . Page 3

ACCC Manual Tells
How To Set Up,
Run Cancer Program
. . . Page 4

ACCC Recommends
Cancer Act Changes
. . . Page 5

Abstracts Of Papers
Presented By Breast
Cancer Task Force
. . . Page 6

NCI Advisory Group,
Other Cancer Meetings
For September, October
. . . Page 6

CREG Announced
For Premorbid
Psychological
Factors Study
. . . Page 7

RFPs Available
. . . Page 8

DEMONSTRATION PROJECTS WILL NOT CLOSE, NCI, ACS SAY; INTERIM GUIDELINES SET

(Continued from page 1)

against routine use of mammography for asymptomatic women under age 50.

The letter describing the guidelines was signed by Diane Fink, director of the Div. of Cancer Control & Rehabilitation through which BCDDP receives NCI support, and by Arthur Holleb, ACS senior vice president for medical affairs and research. The letter notes that both NCI Director Frank Rauscher and ACS President Benjamin Byrd concur in the guidelines.

The guidelines recommend mammography for women of any age in which there is a suspected breast neoplasm; asymptomatic women over 50 as part of a regular screening program; for women 35-50 "if she and the physician agree that it is in her best immediate interest;" and women at high risk because of family history, reproductive history, or prior breast cancer.

The letter emphasizes that "there is no intention to close or phase out the BCDDPs."

Preparation of the guidelines had been all but completed when Theodore Cooper, assistant secretary for health, described them in an appearance on a television network program Aug. 22. A point in which Cooper differed with the guidelines was his statement that mammography should not be used on asymptomatic younger women even when the women insist on it.

The letter follows:

"The purpose of the BCDDP's was to demonstrate the ability to recruit, screen, and follow a population of 270,000 asymptomatic women for the early detection of breast cancer. Screening procedures included history, physical exam, mammography and thermography in all women. The original purpose of recruitment and initial evaluation has been accomplished and has resulted in the detection of many breast cancers.

"As you are aware, the value of mammography in totally asymptomatic women under the age of 50 has been questioned. The value of mammography for screening in women over the age of 50 years seems established. There is no question as to the value of mammography as part of the diagnostic workup for symptomatic women of any age. The ACS and NCI believe that the BCDDP Project directors must have guidance for a course of action until all final reports are submitted to NCI and have been evaluated by the NCI. These include the reports of Drs. Upton and Thomas.

"In addition, many of the project directors have requested an evaluation of benefit derived from the BCDDPs. In order to begin this evaluation, we will be reviewing carefully the entire demonstration project with special reference to those cases detected by mammography alone.

"The director of the National Cancer Institute and the president of the American Cancer Society concur with the following guidelines.

"1. For women of any age in which there is a suspected breast neoplasm, mammography is an accepted part of the complete diagnostic workup.

"2. For asymptomatic women over 50, definite benefit from adding mammography to physical examination has been demonstrated. Mammography is indicated as part of a regular screening program.

"3. For asymptomatic women ages 35-50 years, the benefit of the sophisticated types of mammography currently available have not been in common use long enough to demonstrate its benefit in reducing mortality in the screened population. It is by no means clear that there is no benefit. In younger women with evidence of being at special risk of breast cancer, the techniques employed may have value in detecting early breast cancer.

"4. The possible risk of inducing a breast neoplasm by the mammographic procedure itself is assumed, but for any individual woman is very small, e.g., as stated by Dr. Upton, "...a single mammographic examination with the newer low-dose technique, which involves a dose of one rad or less, would be expected to increase a woman's lifetime risk by no more than one percent. Hence, since the risk from natural causes that the average woman will develop breast cancer during her lifetime is roughly one in 15, or 7%, a single mammographic examination might increase her lifetime risk from 0.07 to 0.0707; by the same token, it would take 100 examinations to double her lifetime risk—that is, to raise it to 0.14. Because the incremental risk per examination is small relative to the individual's lifetime risk from natural causes, a woman should not be reluctant to have a mammogram if there are medical or psychological grounds for desiring the information it could provide. On the other hand, although the presumptive risk to a single individual may be small, the total risk to a large population of healthy women might not be justified unless outweighed by the expectation of a commensurate benefit."

"5. Thus, the following interim guidelines are prudent. We cannot recommend the routine use of mammography in screening asymptomatic women ages 35-50 years in the NCI/ACS BCDDP at this time. However, in the face of a very small presumed risk for any individual woman, we do not recommend withholding mammography from a woman age 35-50 years if she and the physician agree that it is in her best immediate interest.

"6. For women at high risk because of family history, reproductive history, prior breast cancer, or tumor, etc., the benefits as well as the possible risks of x-ray mammography should be fully explained to the woman concerned and the final decision made between her and the physician.

"7. As with any x-ray examination, radiation dos-

age must be kept to the lowest dose consistent with good image quality. All screening participants should be informed that the x-ray equipment in the BCDDP program is regularly monitored to determine the radiation exposure levels and these levels are reviewed by experts in radiation physics.

"8. Women of any age who decline mammography should be encouraged to continue in the screening program for history, physical examination, and thermography.

"9. Regardless of the final recommendations, you and your screeners should know that there is no intention to close or phase out the BCDDPs. It is also to be noted that the screening program could be modified in the future in the event of development of new scientific information."

Fink added, "I want to repeat that these are interim guidelines. We appreciate fully that there may also be a risk in depriving asymptomatic women under the age of 50 of potential benefit to them as individuals. On the other hand given the possibility of even low risk to large numbers of such women we feel the above guidelines are most prudent until such time as additional current data can be further analyzed."

FREDERICK RFP AVAILABLE OCT. 22;

THREE-FOUR MAY CHALLENGE L-B

Recompetition of the contract to operate and maintain the Frederick Cancer Research Center opened formally this week with the release of the synopsis announcing the RFP, which will be available about Oct. 22.

Indications are that three and perhaps four organizations will challenge the present contractor, Litton Bionetics, in the new competition for the job that will amount to about \$25 million a year.

When the job of converting the former Army biological warfare center to cancer research was advertised in 1972, more than 20 organizations entered the first round of competition, including such giants as IBM and TRW. That list was quickly trimmed to about 10 serious competitors. Eventually there were five finalists—Litton Bionetics, EG&G/Mason Research Institute, Microbiological Associates, Dow Chemical Co., and a joint venture including Flow Laboratories and Northrop Corp.

All five submitted complete proposals, and NCI negotiated contracts with Litton-Bionetics and EG&G/Mason, finally selecting the former in what contract officers felt was an extremely close competition.

A Temporary Committee for Review of Frederick Cancer Research Center has been chartered by NCI, with its first task the review of the work scope to be included in the RFP. The committee will meet Sept. 16, NIH Bldg 31 Room 8, starting at 9 a.m., to discuss the work scope. The meeting is open and presumably will be well attended by representatives of organizations who plan to enter the contest.

The synopsis announcing the RFP follows (no RFP number has yet been assigned):

Proposals will be solicited for the scientific, technical, and business management and operation of the FCRC for the period Sept. 26, 1977, through Sept. 25, 1982. A single 5 year contract is to be awarded for both the performance of scientific research and the management and operation of the center. A detailed scientific proposal will not be required; however, offerors shall submit a proposal, including scientific organization and staff to continue research and development programs as described in the RFP and contractor progress reports. Alternate proposals which offerors may elect to submit shall be in detail.

Operation of the center will include technical and administrative services normally provided in support of scientific research activities. Alteration, renovation and maintenance of facilities will be required. A cost-plus-award-fee/cost-plus-fixed-fee contract is contemplated at an annual level of \$25 for the first contract year, exclusive of alteration/renovation. The FCRC consists of 67 buildings and 71 acres.

Estimated date (deadline) for proposal submission is mid-January 1977. A pre-proposal conference, to include a facility inspection of FCRC, will be held approximately three weeks after the RFP is mailed.

Specific evaluation criteria and relative weights will be contained in the RFP. Examples are:

- a. Corporate experience in managing the business and scientific aspects of a research facility.
 - b. Qualifications of the director, key assistants, and other personnel in fields of endeavor comparable to this effort.
 - c. Understanding of program goals.
- For alternate proposals, in addition to above:
- a. Feasibility of alternate approach.
 - b. Availability of qualified personnel for the specific alternate.
 - c. Proposed utilization of space and other resources at FCRC.
 - d. Expected contribution to objectives of National Cancer Plan.
 - e. Merit of alternate proposals as compared to the current requested program.

Inquiries and requests for the RFP should be directed to Ronald Defelice, Contracting Officer, NCI, FCRC, Frederick, Md. 21701, phone 301-663-7148.

The total award over the five years of the contract with Litton Bionetics could exceed \$100 million. The total actually stands now at \$99,068,000, with \$28.6 million listed presently for the fifth year covering a 15-month period ending Sept. 25, 1977.

During the first four years, L-B received \$2,831,000 in award fees based on performance and another \$138,000 in fixed fees. For the fifth year, the award fee pool is \$1.4 million, but the firm probably will not receive more than 80-85% of that amount. The fixed fee for the fifth year is \$400,000.

Litton Bionetics' award fee during the first four years has ranged from 75-81% of the amount in the pool. The entire amount earned by the company has been 4.1% of the contract total.

Robert Stevenson, general manager for L-B at Frederick, told *The Cancer Letter* that the rest of the company, and other firms in the biomedical research field, average from 6.5 to 8.5% earnings on their contracts.

Here's how NCI explained how the fees are determined:

"Both award fee and fixed fee are negotiated upon the government's assessment of the difficulty of the contract work per se and the factors attendant to accomplishing such work. For example, a fee percentage range of 7-15% is computed for each contract

labor dollar negotiated, depending upon the complexity of the work and degree of expertise required. Associated contract costs for materials and supplies, equipment, fringe benefits, other costs (e.g. travel, consultants, etc.), and construction are negotiated within a fee percentage range of 0-3%. Consideration is also given for the contractor investment, government assistance, degree of cost risk, nature of work, and contractor performance record."

Benno Schmidt, chairman of the President's Cancer Panel, told the Panel last week that he had received some criticism from scientists who felt that \$28 million was too much for NCI to be spending at Frederick considering its problems in finding enough money to fund other programs.

Director Frank Rauscher pointed out that the \$28 million covered a 15-month period, that the annual rate would be held at \$23 million (although the RFP announcement lists the first year of the new contract at \$25 million).

Rauscher and other staff members also pointed out that much of the contract amount paid for services and supplies needed by various NCI programs, both intramural and extramural research; that it includes cost of viruses, reagents and drugs produced at Frederick which are supplied to scientists at no charge; and that it includes \$2.8 million for the basic research program there mandated by the National Cancer Advisory Board, directed by Michael Hanna.

Stevenson said he was pleased with the progress made during the first four years of the contract. "We're ahead of schedule. Perhaps we're not where we would like to be, but we are very pleased with the way we are developing, with the rate of progress. We have established good, sound scientific programs, with some excellent scientific talent."

ACCC MANUAL TELLS IT ALL — HOW TO SET UP, RUN A COMMUNITY CANCER PROGRAM

A "Delegates Manual," a four-inch thick, 14-pound compendium of suggestions and directions for organizing and operating a community cancer program has been sent to delegate members of the Assn. of Community Cancer Centers. As big as it is, the manual's publisher's promise that it will get bigger.

The manual is the culmination of a year-long project by ACCC, headed by its Communications Committee chaired by David Wishart. ACCC calls it a "delegates" manual because it is available only to delegate members (those with a full voting membership) of the organization. Wishart and fellow ACCC officers feel the manual alone is worth the price (\$250 annual dues) of a delegate membership.

The manual grew from a suggestion by ACCC President Gale Katterhagen that it might be useful to provide members with one or two small pamphlets which would describe the details of tumor board organization and function and multidisciplinary team management of cancer. Wishart's committee soon determined

that there are other aspects of cancer program design and operation which could use the same attention.

The committee utilized two major sources for information included in the manual: The Commission on Cancer of the American College of Surgeons which had previously put together information packets (included in the manual) designed to facilitate establishment of cancer programs in accredited hospitals (*The Cancer Letter*, Aug. 20); and original contributions by ACCC members who had already been through the mill in organizing cancer programs of various types and sizes.

The manual includes such nuts and bolts items as a description of NCI organization, guidelines for grant and contract applications, names of all cancer related societies and volunteer organizations, schedule of tumor registrar training courses, activities of the American Academy of Family Physicians Committee on Cancer, and names of institutions providing accredited courses in enterostomal therapy.

ACCC acknowledged that there are gaps in the manual and promised they would be filled by future distributions.

In the introduction, Wishart wrote, "Although the American College of Surgeons has for years advocated the establishment of cancer programs in hospitals across the nation, only a small fraction of medium-sized and smaller hospitals has actually promoted an organized cancer effort. Some of the larger hospitals also lack formal programs. One of the purposes of ACCC is to encourage the establishment of cancer programs in all types of community settings."

Wishart said that much of the recent efforts by government and voluntary agencies to organize cancer programs in communities "have been directed by persons who have never been involved in community medical practice and therefore find it difficult to communicate with those who are. Predictably, plans and programs conceived by those who are strangers to community medical practice often seem inappropriate to the community physician who, because he still retains some freedom of choice, may refuse to cooperate with them."

Wishart cited an NIH memorandum which suggested that quality assurance under Medicare, Medicaid and national health insurance might require use of reimbursement policies "to concentrate care for cancer patients in cancer care centers meeting certain standards."

"Of course," Wishart said, "the basis for government attempts to limit certain kinds of care to specific institutions is the assumption that 'care centers' which have not adopted and met standards of quality probably are inadequate. . . . It becomes obvious that if community physicians believe their cancer management practices are up to snuff, it is only prudent to take the steps necessary to demonstrate that such is the case, if they expect to be permitted to continue to care for their community's cancer patients."

More positive reasons for establishing a cancer program include, Wishart said:

- Properly organized, a cancer program can result in more efficient handling of patients. "This means earlier detection, more accurate diagnosis, better planning of treatment, better access to all treatment modalities, fewer dropouts from followup, more widespread application of rehabilitation efforts, fewer errors in judgment or mishandled cases. All this can be accomplished with less delay between diagnosis and treatment, less patient travel, and less patient or third party expense."

- Coordination of anticancer efforts make it possible for a community to acquire additional resources of equipment and personnel.

- Problem areas are more easily defined and easier to correct.

- Educational efforts can be directed toward specific needs.

- Relationships with other communities and with larger centers will be facilitated.

"There are less tangible benefits. The cancer program involves lay persons, as well as professionals other than physicians. Cooperation is its hallmark. By working together toward a common goal, all these groups develop a greater sense of mutual respect and confidence in one another. The physician will know he is giving high quality care, and the patient and his family will know it, too."

Here's how the manual is organized:

Components and Functions of Community Cancer Programs

Various individuals contributed their views, and Wishart encouraged ACCC members to submit reports on their own experiences which could be included. This section now includes descriptions of:

- Formation and operation of a cancer committee -membership, organization, logistics.

- The cancer registry, "one of the foundation stones of a cancer program." Included is a description of the Wilmington, Del., Medical Center's tumor registry.

- Tumor board, a mechanism for "continuous evaluation of the quality of cancer care, multidisciplinary case consultation, and ongoing education of physicians and allied health personnel."

- Local liaison useful in development of community cancer programs.

- A history of cancer control in Delaware, by Robert Frelick.

- Examples of network cancer program components, including procedures for tumor control conferences and tumor control clinics.

- Detailed analyses of the role of the tumor board in the 100-200 bed hospital, the 200-400 bed hospital, and the hospital with more than 400 beds.

ACCC Organization & Activities

This includes names and addresses of members and officers, description of the organization's efforts to

work with NCI, Congress and other agencies and organizations, ACCC committees, and sample copies of its quarterly newsletter, *ACCCtion*.

Directory of Cancer Institutions and Organizations

Names and addresses of American Federation of Clinical Oncologic Societies Board of Governors, list and addresses of 20 cancer organizations, list of the comprehensive cancer centers, and descriptions of the programs of the American Academy of Family Physicians Committee on Cancer, the Oncology Nursing Society, the College of Chaplains, American Physical Therapy Assn., International Assn. for Enterostomal Therapy, and the National Tumor Registrars Assn.

National Cancer Program

Includes description of duties and names of members of the National Cancer Advisory Board, NCI's instruction book about research grant applications, NIH grant application regulations.

Cancer Registry

Includes a detailed statement on "Philosophy of Cancer Registry Design and Operation," by CDP Associates, the consulting firm which has assisted in the organization and operation of ACCC; and the Cancer Registry Manual, by the American College of Surgeons Commission on Cancer. The latter includes suggestions for planning a cancer registry, basic requirements, operation procedures, and reporting registry data.

Sample Cancer Program Forms

Includes various examples submitted by members, such as tumor registry followup, confidential report of neoplasm, tumor board case evaluation summary, breast cancer patient history, treatment flow sheet, oncology treatment summary, chemotherapy record, clinical classification, radiotherapy records. It also includes a copy of the Oncology Procedure Manual for the Wilmington, Del., Medical Center Section on Oncology.

Allied Health Professionals in Cancer

Description of the functions of non-physician health professionals whose work is important in high quality cancer management.

Clinical Investigation Programs

Includes only the reprint of an article in *American Family Physician*, January, 1976, by Donald Flaster, Mendham, N.J., "Clinical Research by the Family Physician." As with other sections with limited or no material at all, additional material will be sent to members for inclusion in the manual as it is obtained.

ACCC ANNUAL MEETING MAY INCLUDE

PITCH FOR CANCER ACT CHANGES

The Assn. of Community Cancer Centers third annual meeting, scheduled Jan. 28-30 in Washington, D.C. (Key Bridge Marriott), will emphasize three topics:

- Psycho-social considerations of cancer care.

- Allied health personnel and the team concept of cancer care.

- Developing a community cancer program.

Workshop topics include the hospital oncology unit, administrative concepts of marketing and developing a cancer program, the clinical nurse oncologist, continuing education for non-physicians, outpatient day care programs, tumor boards, registries and program accreditation, clinical investigation in a community cancer center, the enterostomal therapist, psychosocial group therapy for patients and staff, and relationships to comprehensive cancer centers.

Members were urged to invite their representatives and senators to the cocktail party planned for Saturday evening, Jan. 29.

Key members of House and Senate Health committees also will be invited. If they show up, they probably will be buttonholed by ACCC members who will be pushing the organization's recommendations for the National Cancer Act when it comes up for renewal next year. Changes ACCC intends to recommend include:

- Significant expansion of attention to community level cancer problems and needs.

- Increased emphasis on and development of funding mechanisms for clinical research in community settings.

- Accurate determination of resources, strengths, weaknesses of various types of community cancer programs.

- Finding efficient means of registering cancer patients in small communities for purposes of clinical followup, epidemiological study, and cancer care effectiveness evaluation.

- Identifying the most efficient methods of data dissemination and professional education for various community settings and personnel categories.

The annual meeting is open to anyone interested in community cancer programs, whether or not they are ACCC members. Advance registration is recommended. Write to ACCC, PO Box 30279, Bethesda, Md. 20014.

ABSTRACTS OF PAPERS PRESENTED BY BREAST CANCER TASK FORCE

Following are abstracts of papers presented at the most recent meeting of Breast Cancer Task Force contractors. The papers describe ongoing research being performed by the Task Force and have not been published elsewhere.

ACS-NCI BREAST CANCER DEMONSTRATION PROJECTS IN RELATION TO THE HIP STUDY — William Pomerance, NCI

The Breast Cancer Detection Demonstration Project is now very close to having recruited all its screenees (280,000). The data that are available from this project are still preliminary, being incomplete in some aspects, largely unedited and without pathology quality control review. Some aspects of these data have been consistent enough to warrant review at this time. More significantly, it is important that we look at the data relating to the cancers found and compare them with similar data available to us from the HIP study. This should be done in an effort to determine the present state of the art of the screening procedure which includes mammography and physical examination as compared to the state of this art over 10 years ago. Such an evaluation will

determine whether the benefits to be derived from such screening have increased or remain unchanged.

PHYSICAL ASPECTS — F. O'Foghludha, Duke Univ. Medical Center

The purposes of the physics study are: (1) to ensure that clinical comparisons are made under accurately reproducible physical conditions, and that supposedly identical techniques used in the participating institutions are in fact identical; (2) to study the basic physical factors underlying any improvements in diagnostic accuracy that may be observed, with a view to further improvement through special attention to the identified enhancing factors.

The three physics subgroups have the following assignments: Guttman Institute (Malsky) is responsible for calibration, for maintenance of technique equivalence, and for measuring patient dose—that is, the amount of radiation; Duke Univ. (O'Foghludha) is responsible for measuring spectral distributions—that is, the kind of radiation; M.D. Anderson (Hevezi) is studying the response of recording media such as photographic film and xerographic plates.

Under this program, tube voltage and current waveforms, together with equipment exposure-rates and patient doses, have been studied using "master" equipment brought to all three institutions by Malsky, and the calibrations of all equipment used in the study now agree to about $\pm 2\%$. Malsky has demonstrated that in typical examinations using molybdenum anodes with film recording, patient dosages for matched rare-earth/film combinations, for "Lo-dose" and "Type AA" films, are in the approximate ratio of 1:2:8 (with 0.5 rad as the unit) while for typical xerographic exposures using tungsten-anode tubes the corresponding dosage level is about 3.

O'Foghludha has set up an apparatus in which x-rays can be excited by any voltage waveform (constant-potential, full-wave, variable-ripple) and has examined the spectral output under these waveforms for different anode/filter/kV combinations. It has been shown that the Mo filter plays a less important role than expected, that selectively filtered tungsten-anode tubes do not efficiently simulate molybdenum-anode spectra, and that the reverse (use of molybdenum-anode tubes at high kV to simulate tungsten-anode spectra, as is not infrequently done in xeromammography) carries an unacceptable dose penalty.

Hevezi has studied alternatives to the modulation transfer function as a means of specifying xerographic receptor performance and has constructed phantoms which permit direct intercomparison of techniques in conditions that realistically simulate clinical situations.

Joint work (Malsky, O'Foghludha) on measurement of average dose has begun and a further joint study (Hevezi, O'Foghludha) on receptor response to monoenergetic radiation is being planned.

MASS SCREENING FOR BREAST CANCER BY ELECTRONIC INFRARED PATTERN RECOGNITION — JoAnn Haberman

A scanning infrared camera with the unique capability of recording and displaying absolute temperature images at conventional video frame rates has been constructed. These images are recorded on video tape and subsequently digitized. Algorithms for extraction of temperature features from these images have been developed. Specific quantitative temperature parameters are being computed for normal and symptomatic subjects.

Additional abstracts will appear next week.

NCI ADVISORY GROUP, OTHER CANCER MEETINGS FOR SEPTEMBER, OCTOBER

Diet & Cancer Scientific Review Committee—Sept. 1, NIH Bldg 31 Room 4, open 8:30–9:30 a.m.

Cancer & Nutrition Scientific Review Committee—Sept. 2, NIH Bldg 31, Room 7, open 8:30–9:30 a.m.

Committee on Cancer Immunodiagnosis—Sept. 2, NIH Bldg 10 Room 4B14, open 1–1:30 p.m.

President's Cancer Panel—Sept. 8, NIH Bldg 31 Room 7, 9:30 a.m., open.

Tobacco Working Group—Sept. 8, NIH Bldg 31 Room 4, 9 a.m., open.

Breast Cancer Task Force Workshop—Sept. 8, Bethesda Holiday Inn, 8:30 a.m., open.

Combined Modality Committee—Sept. 9, NIH Bldg 37 Room 6B23, open 1–1:30 p.m.

Breast Cancer Epidemiology Committee—Sept. 9, Bethesda Holiday Inn, open 9:30 a.m.—adjournment.

Breast Cancer Experimental Biology Committee—Sept. 9, Landow Bldg Room C418, open 8:30 a.m.—12:30 p.m.

Breast Cancer Treatment Committee—Sept. 9, NIH Bldg 31 Room 8, open 8:30—10:30 a.m.

Breast Cancer Diagnosis Committee—Sept. 9, Bethesda Holiday Inn, open 8:30 a.m.—12:30 p.m.

Committee on Cancer Immunobiology—Sept. 9-10, Landow Bldg Room C418, open Sept. 9 7—7:30 p.m., Sept. 10 8:30 a.m.—adjournment.

Epidemiology of Cancer Control—Sept. 9, Roswell Park Continuing Education in Oncology, registration required.

Cancer Control Intervention Programs Review Committee—Sept. 9-10, Blair Bldg Room 110, open Sept. 9 8:30 a.m.—noon, Sept. 10 8:30 a.m.—adjournment.

National Bladder Cancer Project Working Cadre—Sept. 9-10, Logan Hilton, Boston, open Sept. 9 1—5 p.m., Sept. 10 8:30 a.m.—adjournment.

National Cancer Advisory Board Subcommittee on Centers—Sept. 12, NIH Bldg 31 Room 10, open 7—9:30 p.m.

NCAB Subcommittee on Diagnosis & Treatment—Sept. 12, NIH Bldg 31 Room 7, open 4—4:30 p.m.

NCAB Subcommittee on Carcinogenesis & Prevention—Sept. 12, NIH Bldg 31 Room 8, open 4—4:30 p.m.

National Cancer Advisory Board—Sept. 13-15, NIH Bldg 31 Room 6, open Sept. 13 9 a.m.—noon, Sept. 14 9 a.m.—5 p.m., closed Sept. 15.

Cancer Control Community Activities Review Committee—Sept. 13, NIH Bldg 31 Room 10, open 8:30—9 a.m.

Committee on Cancer Immunotherapy—Sept. 14-15, Landow Bldg Room C418, open Sept. 14 10:30 a.m.—5 p.m., Sept. 15 8:30 a.m.—adjournment.

Diagnostic Research Advisory Committee—Sept. 15, NIH Bldg 31 Room 8, open 8:30 a.m.—noon.

Workshop on "A Rational Evaluation of Pesticidal vs. Mutagenic/Carcinogenic Action"—Sept. 15, NIH Library of Medicine Billings Auditorium, 9 a.m.—4:30 p.m., open.

Temporary Review Committee for Frederick Cancer Research Center—Sept. 16, NIH Bldg 31 Room 8, 9 a.m., open.

Committee on Cytology Automation—Sept. 16-17, NIH Bldg 31 Room 7, open Sept. 16 9—10 a.m.

National Conference on Cancer Research & Clinical Investigation—Sept. 20-22, Chase Park Plaza, St. Louis.

Virus Cancer Program Scientific Review Committee B—Sept. 20, Landow Bldg Room C418, open 9—9:30 a.m.

Diagnostic Radiology Committee—Sept. 22, NIH Bldg 31 Room 8, open 8:30 a.m.—noon.

Cancer Control & Rehabilitation Advisory Committee Subcommittee on Community Activities—Sept. 22, Bethesda Holiday Inn, open 7:30—9:30 p.m.

CC&R Advisory Committee Subcommittee on Cost Reimbursement—Sept. 22, Blair Bldg Room 110, open 1 p.m.—adjournment.

Cancer Control & Rehabilitation Advisory Committee—Sept. 23-24, NIH Bldg 31 Room 8, 9 a.m., open.

Recent Advances in Cancer Treatment—Sept. 23-24, Brussels.

Virus Cancer Program Scientific Review Committee A—Sept. 27-28, NIH Bldg 37 Room 1B04, open Sept. 27 9—9:30 a.m.

Biometry & Epidemiology Contract Review Committee—Sept. 27-29, Landow Bldg Room C418, open Sept. 27 7—11 p.m., Sept. 28 8:30 a.m.—noon.

Workshop on Review of the Field of Immunology for Application to Cancer Cause & Prevention—Sept. 27, Landow Bldg Room C418, 9 a.m.—5 p.m., open.

Interagency Coordinating Committee for Cancer Control & Rehabilitation—Sept. 29, NIH Bldg 31 Room 7, open 9 a.m.—adjournment.

Virus Cancer Program Advisory Committee—Sept. 30-Oct. 1, NIH Bldg 31 Room 4, 10 a.m. both days, all open.

Clinical Cancer Education Committee—Sept. 30-Oct. 1, NIH Bldg 1 Wilson Hall, open Sept. 30 8:30—9:30 a.m.

President's Cancer Panel—Oct. 1, Univ. of Texas, Houston, 9:30 a.m., open.

Recent Advances in Cancer Chemotherapy—Oct. 8-9, Louisiana State Univ., New Orleans.

Workshop on Tumor Promotion & Cofactors in Carcinogenesis—Oct. 12-14, Marine Biology Lab, Woods Hole, Mass., open Oct. 12 8 a.m.—10 p.m., Oct. 13 9 a.m.—10 p.m., Oct. 14 9 a.m.—1 p.m.

Newest Methods in the Diagnosis of Cancer—Oct. 13-14, Roswell Park Continuing Education in Oncology, registration required.

American Society of Therapeutic Radiologists—Oct. 13-17, Atlanta Regency Hyatt House.

Management of Early Breast Cancer—Oct. 22-23, Lugano, Switzerland.

5th International Tutorial on Clinical Cytology—Oct. 23-31, Vienna.

Div. of Cancer Treatment Board of Scientific Counselors—Oct. 25-26, NIH Bldg 31 Room 10, open Oct. 25 9 a.m.—5 p.m., Oct. 26, 9 a.m.—adjournment.

Cancer Center Directors—Oct. 25-27, Beach Club Hotel, Naples, Fla., 8:30 a.m. each day, open.

Div. of Cancer Biology & Diagnosis Board of Scientific Counselors—Oct. 29, NIH Bldg 31 Room 4, 9 a.m.—5 p.m., open.

CANCER RESEARCH EMPHASIS GRANT

DCCP-30

Title: *Premorbid psychological factors as related to cancer incidence*

Deadline: *Feb. 1, 1977*

NCI is accepting applications for support of research projects on the relation of premorbid psychological factors to the occurrence of cancer in man. Many workers have reported the presence of such associations, but most of them have tested patients after they had the disease without attempting to deal with its possible effects on test results or on accuracy of recollection. Since cancer is known to produce neurological symptoms in a non-trivial proportion of cases, and to affect the psyche in a considerable proportion of cases, the evidence of these studies is very unconvincing. In the few studies with premorbid test results—clearly uncontaminated by the disease—the number of cases is so small that positive findings are also not convincing. Yet the extensive literature on stress effects in animals and in man, and the relation of personality factors and traumatic events to incidence of other diseases leads one to inquire about a similar relationship for cancer. This research area, therefore, needs more definitive work.

A background paper on the issues in this area written by Bernard Fox will be sent to potential applicants, on request, by James Murray, Div. of Cancer Cause & Prevention, NCI.

Evidence of the effects of stress and psychological factors on cancer incidence will point to important relationships between the internal milieu (especially hormones and immunocapability) and cancer susceptibility. If personality or stressful events can be related to cancer in general, or to cancer at specific sites, this connection could increase our understanding of the total etiological picture for such sites or cancer in general. Several avenues for improved primary and secondary prevention would then open up.

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

Applicants should propose an individual project. Applicants should elaborate on the purposes, objectives, rationale, and significance stated in this announcement and must complete portions of the applications pertaining to procedural details, the investigator's related experience, facilities available, budgets, and biographical information for key professional personnel. The application should also state the duration of time for which the support is requested. It is anticipated that the project period will not exceed five years.

Use application form NIH-398. In both the covering letter and at the top of the space provided for an abstract on page 2 of the application, identify this CREG announcement by its title number and the date of publication (Aug. 20, NIH Guide) as the one to which the application responds. Mail the application and the covering letter to Div. of Research Grants, NIH, Bethesda, Md. 20014.

For further information potential applicants may contact James Murray, Div. of Cancer Cause & Prevention, NCI, Bethesda, Md. 20014, (301) 496-3116.

RFPs AVAILABLE

Requests for proposal described here pertain to contracts planned for award by the National Cancer Institute, unless otherwise noted. Write to the Contracting Officer or Contract Specialist for copies of the RFP. Some listings will show the phone number of the Contract Specialist, who will respond to questions about the RFP. Contract Sections for the Cause & Prevention and Biology & Diagnosis Divisions are located at: NCI, Landow Bldg., NIH, Bethesda, Md. 20014; for the Treatment and Control Divisions at NCI, Blair Bldg., 8300 Colesville Rd., Silver Spring, Md. 20910. All requests for copies of RFPs should cite the RFP number. The deadline date shown for each listing is the final day for receipt of the completed proposal unless otherwise indicated.

RFP NCI-CB-74106-37

Title: *Studies of assays which distinguish initiation from promotion phases of mammary carcinogenesis*

Deadline: Dec. 6

NCI is interested in contracting for a research and development program in studies of assays to identify hormones, nutrients and other agents which affect the individual phases.

The aim of this project is to develop methods for separating mammary carcinogenesis into these steps

and identify agents which affect initiation and promotion specifically. Any approach is of interest provided it is aimed at the objectives proposed.

RFP NCI-CB-74105-37

Title: *Studies and investigations on the changing sensitivity to carcinogenesis of the mammary gland as a function of the physiological state of the host*

Deadline: Dec. 6

NCI is interested in contracting for a research and development program to extend knowledge of susceptibility of the mammary gland to neoplastic transformation during changing conditions of the host as produced by age or other factors.

RFP NCI-CB-74108-37

Title: *Studies of the methylation of transfer RNA in normal and neoplastic mammary tissue*

Deadline: Dec. 6

NCI is interested in contracting for a research and development program to increase the understanding of the roles of methylation of t-RNA on growth, differentiation, and function of mammary tissue.

The project proposed should include studies on the effects of hormones on the synthesis or activity of specific RNA-transmethylase systems. Any approach is of interest provided it is aimed at the objectives proposed.

RFP NCI-CB-74109-37

Title: *Studies of the influence of mammary carcinoma cells on the formation and absorption of collagen*

Deadline: Dec. 6

NCI is interested in contracting for a research and development program in studies which relate to the mechanism whereby cancer cells invade surrounding and distant dense connective tissue structures including bone and/or to how they are involved in stimulating the production of collagen.

RFP NCI-CB-74107-37

Title: *Studies of the relationship of thyroid function to growth and development of mammary tumors*

Deadline: Dec. 6

NCI is interested in contracting for a research and development program to define the role that thyroid hormones may play in induction and growth of mammary carcinoma in animal models.

Contract Specialist for

above five RFPs: R.H. Stallings
Biology & Diagnosis
301-496-5565.

The Cancer Letter—Editor JERRY D. BOYD

Published fifty times a year by The Cancer Letter, Inc., 1411 Aldenham Ln., Reston, Va. 22090. All rights reserved. None of the content of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the prior written permission of the publisher.