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ACR DEFENDS MAMMOGRAPHIC EXAMS FOR WOMEN 35-40, SAYS CARCINOGENIC THREAT IS "SMALL"

A position paper by the American College of Radiology on mammographic examinations contends that the carcinogenic effects of radiation "at current levels are probably immeasurably small" and insists that routine mammographic screening of asymptomatic women should be performed between the ages of 35 and 40.

ACR distributed its position paper this week following the NCI-commissioned report by UCLA's Lester Breslow which called for immediate halt in routine mammography for women under age 50.

The ACR position was drawn up by its Commission on Cancer, chaired by William Powers, and its Committee on Mammography and

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In Brief

HAZLETON ACQUIRES PRIMELABS, PRIMATE IMPORTER; CULLEN UCLA DEPUTY DIRECTOR

ANNUAL MEETING of the Assn. of Community Cancer Centers will be held in Washington, D.C. Jan. 28-30. . . . **CHARLES COBAU**, chairman of ACCC's Clinical Activities Committee and member of the Board of Trustees, resigned both positions after suffering a coronary. He is recovering after open heart surgery. David Wishart, Olympia, Wash., was named to the board vacancy; James Donovan, ACCC past president, will head Clinical Activities. Other new board members are Abraham Brickner, Detroit, and Robert Clarke, Indianapolis. . . . CORRECTION: ***The Cancer Letter*** reported July 9 that the drug chlorozotocin was designed by Phil Schein, Georgetown Univ., to have no marrow or delayed toxicities in man. John Montgomery, vice president of Southern Research Institute, wrote that the drug and its tetraacetate derivative were designed and synthesized at SRI by T.P. Johnson, et al, with Schein "an interested and helpful collaborator in this work." The same issue also noted that PCNU was proposed by Levin for use against brain tumors; that drug was also designed and synthesized by Montgomery's group. . . . **JOSEPH CULLEN** has been appointed deputy director of the UCLA Cancer Center. He has been program director for behavioral projects at NCI's Div. of Cancer Control & Rehabilitation. . . . **CURRENT ISSUE** of *Preventive Medicine* includes an article on occupationally induced diseases by David Clayson, Eppley Institute, with an introduction by Eppley Director Philippe Shubik; "Smoking and Occupational Cancers," by Dietrich Hoffman and Ernst Wynder; and "Nasal Cancer in the Furniture and Boot and Shoe Manufacturing Industries," by E.D. Acheson, Univ. of Southhampton. . . . **HAZLETON LABORATORIES** has acquired PrimeLabs Inc., New Jersey importer and distributor of non-human primates for scientific research. Manmohan Rai will continue as PrimeLabs president, according to Hazleton President Donald Nielsen.

NCI-ACS DEMONSTRATION PROJECT THREATENED BY MAMMOGRAPHY CRITICS

(Continued from page 1)

Diseases of the Breast. It was signed by Powers, ACR President John Dennis, and Fredric Lake, chairman of the ACR Board of Chancellors.

"Mammography has proven to be the most effective diagnostic tool so far developed for the detection of breast cancer at an early stage before it spreads to regional lymph nodes," the report said. "This early detection increases the probability of cure. Mammography at appropriate intervals in asymptomatic women over age 35 promises to reduce significantly the number of deaths from breast cancer.

"Since there is now no definitive scientific evidence with regard to optimal age for the initial mammogram, frequency of examination, or data on possible long term radiation risk, this statement is being issued, as a summary of current informed opinion.

"In women who have symptoms or physical findings suggestive of possible breast cancer, medical decisions must be individualized to fit the patient's needs. Under these circumstances, mammography is an integral part of the evaluation of the patient.

"Recognizing that definitive data are not yet available that allow the establishment of firm criteria that define a protocol for the screening for breast cancer in asymptomatic women, the ACR recommends the following:

"1. All women should have annual physical examination of the breasts and be taught breast self-examination.

"2. For asymptomatic women the first, or baseline, mammographic examination should be performed between the ages of 35 and 40.

"3. Subsequent mammographic examinations should be performed at one to three year intervals unless more frequent examination is medically warranted.

"4. After age 50, annual or other regular interval examinations, including mammography, should be performed.

"5. Although the carcinogenic effects of radiation at current levels of exposure are probably immeasurably small, continuing attempts to reduce exposure should be made. However, image quality must be preserved for accurate diagnosis to insure the best risk/benefit (cure) ratio.

"6. Each radiologist should assure the periodic monitoring of his equipment and procedures to determine that the patient's exposure is being maintained at the lowest feasible level.

"The protocol currently being followed by the NCI/ACS sponsored "Breast Cancer Detection Demonstration Projects" should be pursued so that the data are as complete and accurate as possible in order that meaningful conclusions can be drawn. Follow-up of the patients must be carried out for a number of years to insure collection and evaluation of the data. Theoretical concerns of possible radiation induced breast cancer do not warrant change in the current protocol of the Breast Cancer Detection Demonstration Projects. Estimates of risk that include a radiation carcinogenic effect are of dubious validity because of the lack of objective scientific evidence. Research must be continued and encouraged to:

"1. Improve methods for measurement of low level radiation.

"2. Further reduce the radiation dose in mammography consistent with good image quality.

"3. Determine the most appropriate age at which to begin screening for different risk groups.

"4. Define women of high risk.

"5. Define those mammographic findings that dictate re-examination at a shorter interval.

"6. Establish the appropriate intervals for re-examination.

"7. Collect evidence of the benefits and risks of mammography.

At stake in the furor created by Breslow's report and by earlier doubts on the safety of mammography expressed by John Bailar of NCI is the future of the NCI-American Cancer Society Breast Cancer Demonstration Projects. Annual mammographic examinations are a key element of the program, and ACS has reported that a significant increase in the number of women with early breast cancer has been found by the screening. Goal of the project is to demonstrate that substantially higher cure rates may be achieved through annual examinations, supported by self-examination and follow-up.

At present, x-ray offers the only proven method for detecting breast lesions before they are physically apparent. Thermography and ultrasound techniques are still in the experimental stage and may also present risks.

NCI Director Frank Rauscher said he may be ready to decide within a matter of weeks on what to do about Breslow's recommendations. The NCI-ACS project already has felt effects of the report: many women enrolled in the program are not showing up for mammogram appointments.

The project is being carried on at 27 centers around the U.S. and has, until now at least, had no difficulty in enrolling women who agree to return for annual checkups after the initial mammograms.

If Rauscher goes along with Breslow's recommendations, the project possibly could be continued by changing the protocol and offering only physical examination and perhaps thermograms for women under 50. How the subsequent data would be reconciled with that collected from the existing protocol would be a problem for the statisticians.

After the flap created by Bailar's objections, which received wide notoriety through Jack Anderson's newspaper column, ACS rejected Bailar's conclusions and expressed its determination to continue the

demonstration project. So far, ACS has not commented on Breslow's report.

HOUSE COMMITTEE EXPANDS RAUSCHER PAY BILL TO INCLUDE ALL NIH CHIEFS

The House Commerce Committee has cleared a bill that would raise the salary of NCI Director Frank Rauscher to $52,000, which would be enough to keep him on the job at least for another year.

The full Commerce Committee expanded the bill written by Rep. Paul Rogers' Health Subcommittee by applying the $52,000 salary to all NIH institute directors, the NIH director and to the assistant secretary for health. Most of the others are commissioned PHS officers and are already being paid in the $45-50,000 range under the law that permits extra pay for MDs. Rauscher is a PhD, not an MD, and his salary has been frozen at the maximum permitted regular federal civil service personnel, now $37,800.

Expanding the bill to include the other directors and Assistant Secretary for Health Theodore Cooper probably will make it more acceptable to Congress. How it will be received by the Administration is something else; the White House somewhat reluctantly went along with the raise for Rauscher but has objected to adding others.

Meanwhile, Rauscher has passed his latest "deadline" for a decision, still waiting for some solid indication that Congress will pass the bill.

CONFEREES TENTATIVELY AGREE ON NCI APPROPRIATION OF $815 MILLION FOR '77

House and Senate conferees have tentatively established a figure of $815 million for NCI in the fiscal 1977 HEW appropriation bill.

The conferees adjourned this week without taking final action on the bill, so that figure is still subject to change. They probably will finish before Congress adjourns for the Republican National Convention, and then take the bill to the House and Senate floors in September. The Budget Act requires that appropriations bills be completed before the start of the new fiscal year, Oct. 1.

The House had approved $773 million for NCI, higher than the $687 million asked by the Administration but far lower than the $845 million requested by NCI and only a little more than NCI received in 1976, $762 million. The Senate voted $850 million.

The conferees reached an initial agreement that NIH appropriations would be a flat 40% of the difference between the two bills, across the board for each institute. That would have given NIH an increase of $86 million over the House figure, and a little more than $803 million to NCI.

Senate conferees later changed their minds, demanded a flat $100 million over the House bill for NIH and also asked that they be allowed to distribute that amount among the institutes. Had that been agreed upon, Senate conferees were ready to give NCI $825 million.

Daniel Flood, chairman of the House HEW Appropriations Subcommittee and House conference chairman, was ready to agree. Other House conferees decided, however, that that and other concessions would make the amount over the President's budget so high that a veto would be guaranteed and that an override would be impossible. They insisted on the 40% agreement.

Sen. Edward Brooke (R.-Mass.) offered a compromise figure of $90 million, rather than the 40%, with the Senate-suggested distributions, which would give NCI $815 million. The conferees agreed.

This was the first House-Senate conference on an HEW appropriations bill held in open session, another result of the reform movement that has opened up most committee meetings to the scrutiny of press and public. Some members grumbled that conference is taking more time as a result, and that the debate is more vicious.

"I don't think that is true," a staff member told *The Cancer Letter.* "It may be more vicious this time, but for other reasons."

ACS-ELEANOR ROOSEVELT INTERNATIONAL AWARDS GO TO 19 FELLOWS FOR 1976-77

American Cancer Society announced 19 ACS-Eleanor Roosevelt International Cancer Fellowship grants totaling $217,940.

The 1976-77 awards will enable the recipients to work with scientists in specialized institutions in other countries.

The 1976-77 Fellows are:

Lionel Crawford (England) to Stanford Univ. School of Medicine.

Gustavo Cudkowicz (State Univ. of New York) to Hôpital Saint-Louis, Universite de Paris, France.

Michael Droller (Stanford) to The Wenner-Gren Institute, Stockholm.

Timo Linna (Temple Univ.) to Swiss Institute for Experimental Cancer Research, Lausanne.

Malcolm MacKenzie (Univ. of California) to Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia.

Gören Magnusson (Sweden) to Stanford.

George Manolov (Bulgaria) to Institute of Genetics, Lund, Sweden and Karolinska Institutet, Stockholm.

David McConnell (Ireland) to Harvard Univ.

Roland Mertelsmann (Germany) to Sloan-Kettering Institute for Cancer Research.

William Mitchell (Vanderbilt Univ.) to Institut d'Anatomie Pathologique, Hôpital Cantonal University, Lausanne.

Ion Niculescu-Duvaz (Romania) to Chester Beatty Research Institute, London.

Kiyoshi Nose (Japan) to Beatson Institute for Cancer Research, Glasgow, Scotland.

Lennart Philipson (Sweden) to Massachusetts Institute of Technology.

Donald Reed (Oregon State Univ.) to Karolinska Institutet, Stockholm.

David Scott (Duke Univ.) to Walter and Eliza Hall Institute of Medical Research, Melbourne.

Massaru Taniguchi (Japan) to Walter and Eliza Hall Institute of Medical Research, Melbourne.

Frederic Troy (Univ. of California) to Karolinska Institutet, Stockholm.

Frederick Valeriote (Washington Univ.) to Institute of Cancer Research, Royal Cancer Hospital, Sutton, Surrey, England.

Jan DeVries (The Netherlands) to Univ. of California (San Diego).

TOBACCO RESEARCH COUNCIL LISTS 14 NEW SMOKING-HEALTH AWARDS

Fourteen new smoking-health projects totaling nearly $1 million were announced by the Council for Tobacco Research-U.S.A., Inc.

Raymond Bosse, Veterans Administration, Boston, "A smoking research program in the normative aging study."

Charles Cochrane, Scripps Clinic & Research Foundation, "The mediation of inflammatory injury of tissue."

Paul Costa, Univ. of Massachusetts, "The relations between smoking motives, personality and well-being."

David Crumpacker, Univ. of Colorado, "Genetic and environmental factors affecting smoking behavior."

Gary Friedman, Kaiser Foundation Research Institute, "Characteristics of smokers and nonsmokers: longitudinal exsmoker study: cohort mortality study."

Jacques Gielen, Univ. of Liege, Belgium, "Cigarette smoke and polycyclic hydrocarbon metabolism in lung and kidney."

Norman Heimstra, Univ. of South Dakota, "Behavioral effects on nonsmokers of exposure to smoking."

William Jusko, State Univ. of New York (Buffalo), "Effect of smoking and its cessation on drug disposition."

Edward Klaiber, Worcester Foundation for Experimental Biology, "Studies of a gonadal and central nervous system syndrome that differentiates smokers from nonsmokers."

Gerald McClearn, Univ. of Colorado, "Heredity and tobacco-related behavior in the mouse."

Kenneth Paigen, Roswell Park, "A genetic test of glucuronidase in bladder cancer."

Lynne Ried, Harvard Medical School, "The effects of irritation and drugs on airway epithelium—an experimental study of mechanisms."

David Talmage, Univ. of Colorado Medical Center, "The role of macrophage-induced factors in cancer immunity."

Gerald Turino, Columbia Univ., "Chemical basis of tissue destruction in obstructive lung disease."

Contract Awards

LITTON FREDERICK TOTAL TO HIT NEARLY $30 MILLION IN 1977

Litton Bionetics will operate the Frederick Cancer Research Center for NCI during the 15-month period ending Sept. 26, 1977 for an amount that probably will reach $30 million.

The amount listed in the contract award announced by NCI was $28.6 million, but additional tasks added during the 15 months could push it over $30 million. It will be the largest amount in the five years Litton has run the center.

The job will be opened up for competition for the 1977-78 award. An announcement of the RFP availability should be made within a few weeks.

Contract award announcements, most of them dated prior to the former fiscal year end date of June 30, continue to pour out of NCI. Although the extension this year of the fiscal year through Sept. 30 relaxed the need to obligate FY 1976 funds before June 30, NCI was determined to complete its contract awards with 1976 money by then.

Awards included:

Title: Molecular studies of human anc animal cancer with emphasis on breast carcinoma
Contractor: Meloy Laboratories, $721,864.

Title: Studies on interrelationship of viruses, genetics and immunity in etiology of cancer
Contractor: UCLA, $855,021.

Title: Testing of antibiotic beers and purified preparations
Contractor: State of Michigan, $69,693.

Title: Pharmacologic disposition of antineoplastic agents
Contractor: Univ. of Southern California, $38,652.

Title: Studies relating to the development of inhibitors to RNA methylation
Contractor: Colorado Medical Center, $115,517.

Title: Quantitative evaluation of protected environments
Contractor: Univ. of Texas System Cancer Center, $446,109.

Title: Study of the pharmacokinetics of anticancer drugs
Contractor: Univ. of Kansas Medical Center, $95,891.

Title: Operation of pathological monitoring services project
Contractor: Univ. of Alabama, $327, 381.

Title: Synthesis of compounds designed to bind specifically to DNA
Contractor: Univ. of Southern California, $424,864.

Title: Selection and development of promising folate antagonists
Contractor: Yale Univ., $143,810.

Title: Isolation of novel antineoplastic components from fermentation broths
Contractor: W.R. Grace & Co., Columbia, Md., $428,810.

Title: Development and application of gas chromatographic techniques
Contractor: Univ. of Missouri, $201,226.

Title: Therapy of patients with gastric carcinoma
Contractor: Mt. Sinai School of Medicine, $737,379.

Title: Therapy of patients with large bowel carcinoma
Contractors: Univ. of Miami, $732,618; Georgetown Univ., $582,895; Univ. of Chicago, $985,616; Mt. Sinai School of Medicine, $912,637; and UCLA, $773,546.

Title: Efforts to develop new prognostic and therapeutic modalities based on basic studies on cell transformation and on transformed cells
Contractor: Litton Bionetics, $20,000.

Title: Determinative and diagnostic microbiological studies
Contractor: Hazleton Laboratories, $2,222,702.

Title: Medical and laboratories support services in support of the Baltimore Cancer Research Center
Contractor: Univ. of Maryland, $12,495,700.

Title: Phase II and III studies in patients with disseminated solid tumors
Contractor: Sidney Farber Cancer Center, $2,127,715.

Title: Preclinical canine bone marrow transplantation and immunotherapy studies
Contractor: Hazleton Laboratories, $229,024.

Title: The isolation of antineoplastic agents from marine and terrestrial invertebrates, vertebrates and insects
Contractor: Arizona State Univ., $375,585.

Title: Therapy of patients with gastric carcinoma
Contractor: Yale Univ., $106,603.

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.

SOURCES SOUGHT Project No. CB-74094-37

Title: *Defining conditions for growth and passage of primary cultures of normal epithelial cells*
Deadline: *Sept. 15*

NCI's Breast Cancer Experimental Biology Committee is seeking potential contractors who are highly qualified and interested in performing studies to determine the nutritional, the hormonal, and feeder-layer requirements for long-term growth of pure mammary epithelial cells.

It is anticipated that the effort will require the supervision of a scientist with expertise in the field of tissue culture and the full-time of a post-doctoral candidate or a highly competent technician.

A resume of capabilities should not exceed four pages and should cover: (a) experience with related projects (only those relevant and recent); (b) description of facilities and equipment; and (c) resumes of key personnel.

Responses should not include cost or pricing information. Responses should be specifically directed to the points mentioned herein. Only those sources which are considered to be most highly qualified for this project will be invited to submit a proposal at the time a request for proposal is issued. Sources that are judged not to have superior qualifications will not be notified.

Organizations interested should submit 30 copies of the resumes of experience and capabilities to P.J. Webb, Contracting Officer, CBDCS, Research Contracts Branch, NCI, Landow Building, Room C-437, Bethesda, Md. 20014.

RFP NCI—CB-74092-37

Title: *Studies and investigations on detection and quantitation of transformed (preneoplastic and neoplastic) mammary epithelial cells in vitro*
Deadline: *Nov. 19*

NCI is interested in contracting for studies on the experimental approaches which are likely to distinguish, on a quantitative basis, differences between normal and transformed cell populations which are primary in origin. Any approach is of interest, particularly the use of models relevant to human disease. The primary transformed cells are to be derived from spontaneous mammary lesions, as well as those induced by physical, chemical or viral agents.

RFP NCI-CB-74089-37

Title: *Studies and investigations on the effect of mammary carcinoma cells on the vascular endothelium*
Deadline: *Nov. 19*

NCI is interested in contracting for studies to increase knowledge of the interaction between neoplastic cells and endothelium, two aspects of which are represented by death or proliferation of endo-

thelial cells as the tumor is being established. Functional and morphological aspects of the problem are of interest. Work with human material is preferred although not compulsory.

RFP NCI-CB-74090-37

Title: *Studies and investigations on prevention of the formation and of the progression of preneoplastic lesions of the mammary gland*

Deadline: *Nov. 19*

NCI is interested in contracting for studies to increase knowledge on the probabilities of reducing: a) the number of preneoplastic lesions of the mammary gland; and/or b) the frequency of their neoplastic transformation.

The project proposed aims at increasing our knowledge in this area by promoting either an expansion of the data already available or by eliciting new approaches for preventing preneoplastic lesions from originating and/or developing into invasive carcinomas. Any approach is of interest provided that it is specifically aimed at the objectives proposed.

RFP NCI-CB-74091-37

Title: *Studies and investigations on the effects of estrogen and progestin on the biological behavior of the mammary gland during the neonatal period*

Deadline: *Nov. 19*

NCI is interested in contracting for studies to obtain new knowledge in animal models of the possible influence of estrogen and progestin on the neonatal mammary gland and other endocrine target tissue when these agents are present at unphysiological levels.

Contract Specialist for above RFPs: R.H. Abbott
Biology & Diagnosis
301-496-5565

RFP NO1-CP-T5838-57

Title: *Literature study on morbidity and mortality rates in nonhuman mammals in relation to diet*

Deadline: *Aug. 30*

The objective of this study is to ascertain and identify the availability and quality of published and unpublished literature on morbidity and mortality rates in nonhuman mammals. Incidence of cancer that can be attributed directly to dietary or environmental factors will be emphasized. The literature will be reviewed to develop animal models for the study of diet, nutrition, and cancer. Prospective offerors should have a familiarity with both relevant published and unpublished literature sources and the ability to conduct critical scientific reviews of literature.

Contract Specialist: Joseph Federline
Cause & Prevention
301-496-6361

RFP NO1-CP-T5839-57

Title: *Development of a guidebook for inclusion of dietary and anthropometric parameters in cancer epidemiology studies*

Deadline: *Aug. 30*

This is a readvertisement of a previous RFP for which no awards were made. The objective of this project is to develop guidelines for epidemiologists interested in collecting dietary and anthropometry data as components of epidemiology studies. Dietary data should encompass not only nutrient intake, but also type of foods eaten, nature of food processing, and frequency of intake.

For purposes of this program, special attention will be given to the study of cancer epidemiology. The output of this project will be compiled as a guidebook. Prospective offerors should have a familiarity with survey techniques for dietary and nutrient assessment along with familiarity of epidemiology survey techniques.

Contract Specialist: Joseph Federline
Cause & Prevention
301-496-6361

RFP NO1-CP-65820-62

Title: *The use of physico-chemical parameters in obtaining structure-activity relationships with potentially cancer related endpoints*

Deadline: *Sept. 29*

NCI is interested in determining the physico-chemical factors that influence the potentially cancer related endpoint of compounds to gain insight into the mechanisms of carcinogenesis and to develop capabilities which could be applied to predicting effects of untested compounds in living systems.

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

RFP ECI-SHP-75-110

Title: *Cigarette smoke dosimetry in man: Development of equipment and techniques*

Deadline: *Late August*

Design, develop and fabricate a cigarette smoking machine that will deliver a known volume of smoke at predetermined intervals or on demand for use by human subjects. Specifications, drawing and manuals are also required as deliverable items.

Subcontract Administrator
Enviro Control Inc.
One Central Plaza
11300 Rockville Pike
Rockville, Md. 20852

RFP NCI-CB-74086-34

Title: *Longitudinal studies of biologic markers in breast cancer patients*

Deadline: *Nov. 1*

The project should be concerned with assay of

human breast cancer tissue and sera prior to mastectomy and throughout the clinical course of the disease for substances which are potential biologic markers for breast cancer. Such studies would assess the levels of several potential markers for breast cancer in biopsy or mastectomy specimens. They would also test how effective one or more specific markers, found in the primary tumor, could be for early detection of recurrence and provide data on the relative concentrations of such markers in primary and metastatic lesions of an individual patient.

Responding agencies should have the demonstrated competence for the assay in sera of one or more specific biologic substances which have potential as diagnostic markers for breast cancer. They should also have the expertise available for development and utilization of assay methods for detection of the chosen markers in specimens of breast cancer, preferably in pathologic sections.

Access to a sufficient population of patients that are going to biopsy for diagnosis of breast cancer who thus would be seen clinically before the time of primary diagnosis of breast cancer and followed at regular intervals during the course of the disease is necessary. Those not diagnosed as breast cancer would be followed as well.

RFP NCI-CB-74085-34

Title: *Use of ultrasound in the diagnosis of breast cancer*

Deadline: *Nov. 1*

Demonstrate the feasibility of ultrasonic techniques with modern equipment for the diagnosis of breast cancer. It is imperative that responding agencies have available modern ultrasonic equipment capable of grey scale recordings of the breast and access to a sufficiently large population of symptomatic and asymptomatic patients.

The purpose of this project is to determine the ultrasonic characteristics of cancer of the breast which will facilitate the diagnosis of malignant breast lesions of one cm or less with negligible false negative rates and with minimal interference by the physician. A second objective is to correlate the ultrasonic images with high quality mammography, breast specimen radiography and pathological specimens. A third objective is to determine the physical factors that result in the various ultrasonic patterns of both benign and malignant lesions of the breast. A two year program is envisioned.

RFP NCI-CB-74097-34

Title: *Prognostic factors for disseminated cancer in patients with "early" invasive mammary carcinoma*

Deadline: *Dec. 1*

Proposals are solicited from institutions having access to populations of female patients with invasive carcinoma 1 cm. or less in size whose primary lesions were treated 10 or more years ago. A major objective of this retrospective study is to determine the incidence of disseminated disease in this population of "early" invasive breast carcinomas by means of a careful follow-up study.

Another goal is the correlation of the initial pathologic and clinical findings with the follow-up studies in an effort to delineate a group of high risk patients who might benefit from adjuvant chemotherapy. Responding organizations should have access to a study population of mammary carcinoma patients with tumors 1 cm. or less in size treated by radical mastectomy and followed for a minimum of 10 years. They should indicate the histologic and clinical material that is available on the study group and state which methods of follow-up are to be utilized.

The proposal could originate from one or a number of collaborating institutions.

RFP NCI-CB-74098-34

Title: *Risk associated with the diagnosis of non-invasive mammary carcinoma and "pre-cancerous" mammary hyperplasias*

Deadline: *Dec. 1*

Proposals are solicited from organizations having access to female populations that have had biopsy procedures performed for the detection of breast carcinoma more than 10 years ago. The objectives of this retrospective study are: 1) to delineate the histopathologic criteria for the lesions of non-invasive carcinoma and a typical mammary hyperplasias found in biopsies of women with clinical breast lesions and 2) to compare the rate of occurence of subsequent breast carcinoma in this group of women, treated by a conservative biopsy procedure only, with the rate found in a control group of women biopsied under similar clinical circumstances but showing either benign lesions or minimal breast abnormalities.

The population groups should be sufficiently large so that statistical evidence of any excess of breast cancer relative to the presence of non-invasive carcinoma or "precancerous" dysplasia can be obtained. The proposal could originate from one or a number of collaborating institutions.

RFP NCI-CB-74104-34

Title: *Relation of intestinal flora to breast cancer in humans*

Deadline: *Jan. 6*

Study of the relationship between intestinal flora and breast cancer in humans. The studies could be addressed to comparing the composition and metabolic patterns of fecal flora in patients with cancer and in controls without cancer or to comparing the flora in groups at high and low risk for breast cancer.

Preference will be given to proposals that do not emphasize speciation and quantitation of fecal flora per se, but rather aim to define and explore causal mechanisms by which the metabolic pattern(s) of the flora might be related to breast cancer risk.

RFP NCI-CB-74103-34

Title: *Epidemiology of minimal breast cancer in initially asymptomatic women*
Deadline: *Dec. 3*

Study of epidemiology of breast cancer diagnosed in established screening programs in initially asymptomatic women. Risk factors known to be associated with breast cancer would be assessed in women with "minimal" non-invasive and "minimal" invasive carcinomas and those groups should be compared with women having "large" invasive carcinomas. The proposal could originate from one or from several collaborating institutions.

RFP NCI-CB-74102-34

Title: *Epidemiology of benign breast disease*
Deadline: *Dec. 3*

The studies formulated should aim at establishing the etiologic features of benign breast disease and should specifically include determination of the relevance of these to the established "risk factors" for breast cancer. The proposal could originate from one or a number of collaborating institutions.

RFP NCI-CB-74099-34

Title: *Estrogen replacement after premenopausal oophorectomy and the risk of breast cancer*
Deadline: *Dec. 1*

Study of estrogen replacement therapy following premenopausal oophorectomy in relation to risk of breast cancer. The group of women taking exogenous estrogens for this purpose is appreciable in size, and the possible effect of such therapy on the risk of breast cancer is an important area for investigation. Studies could be of a case-control or retrospective cohort design. Provision should be made to acquire data bearing on an interval of at least 15 years from start of therapy to possible disease onset ("latent period").

RFP NCI-CB-74100-34

Title: *Pathogenic models of malignant and pre-malignant disease of the breast*
Deadline: *Jan. 19*

The proposal should involve: a) a conjecture or conjectures cast in biological terms about the pathogenesis of one or (preferably) both of these diseases; b) mathematical formulation of this model in which the individual terms are biologically interpretable; c) a plan for estimating the relevant parameters from suitable data; and d) access to a source of real data to which these methods will be applied and against which the adequacy of the model may be tested.

RFP NCI-CB-74101-34

Title: *Endocrine events at the time of first pregnancy*
Deadline: *Nov. 29*

Relevant to the "protective effect" of early first pregnancy against the subsequent development of breast cancer. Studies should take the form of detailed analysis of endocrine function before and after the first completed pregnancy in young and in older, previously nulligravida women.

RFP NCI-CB-74088-34

Title: *Application of assays of cell mediated immunity to the diagnosis of breast cancer*
Deadline: *Oct. 15*

NCI is interested in contracting for application of assays of cell-mediated immunity to the diagnosis of human breast cancer. Responding agencies must have experience with the assays and documented evidence of ability to discriminate benign from malignant breast disease. Detailed summary of such evidence must accompany the proposal.

The assays must be standardized with a good source of antigen or definite plans should be outlined for establishing such a standard. Sufficient quantitites of this standard antigen must be available for the entire course of the study. A detailed clinical protocol for the application of the assay to the immunodiagnosis of breast cancer must be given.

RFP NCI-CB-74087-34

Title: *Diagnostic application of immunologic-cross reactions between breast cancer and known or putative mammary tumor viruses*
Deadline: *Oct. 5*

NCI is interested in contracting for diagnostic application of immunologic cross reactions between human breast cancer and known or putative mammary tumor viruses. Responding agencies should have available assays for detection of mammary tumor viruses, putative mammary tumor viruses and associated antigens, or for immunologic reactivity to these antigens.

The purpose of this project is to determine the usefulness of such assays in the early diagnosis and monitoring of breast cancer. A detailed clinical protocol for the application of the assay to the immunodiagnosis of breast cancer must be submitted.

Contract Specialist for above RFPs: Elizabeth Abbott
Biology & Diagnosis
301-496-5565

The Cancer Letter—*Editor* JERRY D. BOYD

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