THE CANCER RESEARCH EDUCATION CONTROL LETTER

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TAKE PROGRAM DIRECTION AWAY FROM CCIRC, FORM NEW GROUP FOR CLINICAL TRIALS, CONFEREES SUGGEST

Participants in the Potomac Conference developed two major recommendations and a series of lesser ones aimed at achieving better coordination of NCI's various treatment research programs, particularly clinical investigations.

Conferees, including members of the Clinical Investigation Review Committee, NCI staff members and former members, and some cooperative group chairmen, approved these recommendations which CCIRC Chairman Giulio D'Angio will take to the National Cancer Advisory Board:

• A new Clinical Cancer Trials Advisory Committee be established to advise both the Div. of Cancer Treatment and the Div. of Cancer Re-

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In Brief

STAFF, SUBCOMMITTEE REPORTS DUE AT NCAB JUNE MEET; CCIRC TO SPONSOR SYMPOSIUM ON EPIDEMIOLOGY IN OCT.

NCAB JUNE 16-18 meeting will be devoted mostly to review of ongoing NCI programs during the open sessions, plus the usual round of grant application reviews in the closed portion. Reports are scheduled from Board subcommittees on environmental carcinogenesis, implementation of the Zinder Report on the virology program, and centers; from Giulio D'Angio, chairman of the Cancer Clinical Investigations Review Committee, on the Potomac Conference; and from NCI staff members Gio Gori on the nutrition program, William Walter on specialized clinical training programs, Emmett Barkley on biohazards, Louis Carrese on the five-year plan, Gregory O'Conor on international programs, Vincent DeVita on Div. of Cancer Treatment programs, Marvin Schneiderman on survival statistics, James Peters and Michael Hanna on the Frederick Cancer Research Center, Paul Van Nevel on cancer communications activities, Gori on the smoking program, and Robert Hoover on NCI/VA collaboration in cancer epidemiology. . . . **SYMPOSIUM** on "Cancer Epidemiology and the Clinician" will be put on by CCIRC in Boston Oct. 24-26. Current epidemiologic risk factors related to cancer will be reviewed and significant investigative efforts underway will be summarized. Howard Lessner, Univ. of Miami, is chairman. . . . **THOMAS HALL**,associate director for clinical investigation at the Los Angeles County-USC Comprehensive Cancer Center, will leave in August to become director of the Cancer Control Agency of British Columbia and chairman of the Dept. of Oncology at the Univ. of British Columbia. Joseph Bateman, chairman of the Western Cancer Study Group, will direct medical oncology at LAC-USC. . . . **NCI DIRECTOR** Frank Rauscher on the personnel freeze: "We are almost to the point where we will have to say, 'No, Mr. Congressman, we can't take any more money because we don't have staff to manage any more'."

RECOMMENDATIONS FOR COORDINATING COOPERATIVE GROUPS, DCT DEVELOPED

(Continued from page 1)

search Resources & Centers on programs involving clinical investigations.

• An office be established within the office of the NCI director to collect information on all NCI-supported treatment research and to disseminate summaries of that information to those conducting such research.

The two recommendations were suggested as ways treatment research coordination could be accomplished without moving it all into DCT, an option available to NCI Director Frank Rauscher.

The new advisory committee would be unique in that it would oversee programs of two NCI divisions; other committees have responsibility for programs within only one division. It would take over the program advisory role of CCIRC for the Clinical Cooperative Trials Program, leaving CCIRC with only the task of reviewing cooperative group grant proposals and protocols.

Palmer Saunders, former DCRR&C director now with the Univ. of Texas in Galveston, offered the motion recommending the new committee.

"Clearly, the Div. of Cancer Treatment and the Div. of Cancer Research Resources & Centers should share in the major portion of the actual clinical program in the United States," Saunders said. "I think that if you could effect good coordination between those two divisions, the rest would fall into line."

Treatment programs in the Div. of Cancer Biology & Diagnosis and the Div. of Cancer Control & Rehabilitation would not be within the scope of the new committee, Saunders and other participants agreed.

Saunders said the two responsibilities of CCIRC as things now stand involve a conflict of interest: the review of research grant proposals and protocols and its advisory role on program development.

"I think I hear this group talking out of both sides of its mouth," Saunders said. "Sometimes they talk in terms of members of cooperative groups and what they need to do to coordinate programs. Other times I hear them talking about separating and shutting down grants that are not productive."

Stephen Carter, DCT deputy director, said Saunders' proposal "on the surface sounds okay." But he wound up voting against the motion. Only one other vote against it was cast, by CCIRC member Nell Sedransk, of SUNY (Buffalo).

Carter pointed out that DCT already has an advisory body, its Board of Scientific Counselors and that the work of the two groups would have to be coordinated.

The contention that bringing treatment research into DCT is "a call for a monolithic DCT" is a "straw man which ought to be put away," Carter said. "I think we ought to just ask ourselves . . . what is the optimal way to bring together the resources of the cooperative groups and the resources of the contract program in the Div. of Cancer Treatment."

Carter said, "It is all well and good to talk about coordination. I mean, we are all reasonable people and we should all coordinate and we all have good interests. That is great. That is fine. But that has not worked up until this point.

"Why has it not worked? Whenever you have two administrative directions there tends to be a little bit of ego in each direction and that is unavoidable. An optimal coordination occurs within the dramework of one program.

Carter said that "it is not impossible" that "some degree of coordination that could not be worked out in the past could be worked out now," and promised to work toward that end. However, he continued to press his view that a better way (than Saunders' motion) might exist.

Neither DCT Director Vincent DeVita nor Rauscher were at the final session of the conference when the recommendations were hammered out. Carter spoke for DCT and NCI Deputy Director Guy Newell spoke for Rauscher.

"No matter how you cut it," Newell said, "the ultimate defender" of a national treatment program as part of the National Cancer Program is the director of the Div. of Cancer Treatment.

"That is where Dick (Rauscher) must go, and that is Vince, like it or not. We happen to like it."

Newell added that this did not "necessarily imply that all treatment activities have to be directed by Vince and his staff." He called for development of a "middle" approach to bring about "some degree of coordination."

Saunders said he interpreted Carter's remarks to mean he was advocating moving responsibility for the cooperative groups into DCT to achieve better coordination. "What makes you think that would effect better coordination? You have activities in the division which do not coordinate with each other. Just by putting something from one place to another does not effect coordination. You know, men make coordination, not administrative departments."

Gordon Zubrod, former DCT director and now director of the Univ. of Miami Comprehensive Cancer Center, said, "This is a struggle that has been going on in the scientific community and at NCI for many years."

Zubrod said that Rauscher and the President's Cancer Panel had charged him with the task of bringing about "a single coordinated view of treatment programs, not in terms of direction or responsibility but at least in seeing that everything was done that could be done for treatment of cancer and that there was good interchange amongst programs.

"But there were many artificial walls among the programs at NCI," Zubrod continued. "Dr. Rauscher felt that it was simply not possible to bring off the

type of coordination that was needed. That, in effect, was one of the reasons I left NCI because I could not get support."

Denman Hammond, NCAB member and director of the USC Comprehensive Cancer Center, said the National Cancer Act did not give NCI "the mandate or authority or resources to conduct the nation's cancer clinical investigation program. It gave it a different kind of responsibility, to facilitate, to foster, to coordinate, to bring together.

"Some administrative device needs to be found so that various divisions at NCI that properly have objectives to contribute to a part of that therapeutic endeavor can share the responsibility for it and integrate their activities," Hammond continued.

"Now I do not think for a minute that that would be best done by consolidating all therapeutic activities under a single division or director. In fact, I think that would be very destructive of some of the programs that exist . . . I believe there is a middle ground."

Hammond's comments summed up the thrust of the advice for Rauscher emanating from the Potomac Conference regarding the lack of coordination between DCT and the cooperative groups. This advice reinforces views Rauscher has already expressed, that he will leave the Clinical Cooperative Trials Program in DCRR&C for the present, but the work of the cooperative groups must be coordinated with DCT.

The Conference also considered ways CCTP could be improved, in addition to achieving coordination with other NCI programs. Foremost among those suggestions was call for increased emphasis on a multidisciplinary approach (***The Cancer Letter,*** May 30). Other improvements were suggested in additional recommendations D'Angio will present to NCAB at its June 16-18 meeting.

Recommendations included:

* A budget increase of $5 million for CCTP, most of which would be used to pay for bringing radiotherapists, surgeons, pathologists and biostatisticians into the program. The budget in the 1975 fiscal year was $19 million including cost of drugs supplied by NCI; the budget for fiscal 1976 is $22-23 million.

* An increase in NCI staff assigned to CCTP, a suggestion that will run up against the Ford Administration's personnel freeze. Most NCI activities are being hampered by staff shortages.

* Periodic meetings to examine the direction of therapeutic research in specific disease categories.

* "The efforts of DCT, DCRR&C, and CCIRC should be pooled with those of other divisions of NCI would bear on treatment related activities. For example, DCT should make maximum use of patient resources afforded by the cooperative groups. This will avoid undesirable competition for scarce funds, investigators and patient resources."

D'Angio explained this recommendation as one developing from the suggestion that DCT should solicit the cooperation groups when it is putting together a new program. "Only if they cannot fulfill those obligations insofar as patient numbers or the inadequacy of whatever it is that needs to be tested, should then a separate appeal be made for other investigators and other patients," D'Angio said.

Carter and DeVita had previously pointed out that DCT contract RFPs had been made available to members of the cooperative groups, but most had fared poorly in the competition. There have been exceptions, and some cooperative group members won DCT contracts and have performed well.

* Standard criteria should be developed for diagnosis, response, and toxicity.

* A newsletter should be published regularly to include information on treatment activities as well as NCI program and policy developments.

* Clinical training programs should be supported.

Barth Hoogstraten, member of the Southwest Oncology Group in Kansas City, Kan., commenting on the recommendation that the DCT should make maximum use of patient resources afforded by the cooperative groups, said, "I am going to put Steve (Carter) on the spot. Do you agree with this sort of thing?"

"I think clearly the DCT is willing to work with the cooperative groups as closely as possible," Carter said. "I think there is a tremendous amount of overlap between what the DCT is attempting to accomplish and the resources that the cooperative groups have. . . I think that clearly DCT would like to integrate as fully as possible the resources of the cooperative groups into our overall strategy, and I do not mean that in a controlling sense, for what we are trying to do in cancer treatment."

Hoogstraten pointed out that the cooperative groups "as a program . . . have no input" into programs developed by DCT. "I think there is a tremendous vacuum there. You are cutting out a very vital component of cancer treatment. Therefore, I say the Div. of Cancer Treatment is a haphazard and willy-nilly sort of thing because it does not include that major component."

Carter responded by pointing out that one of the purposes of the Potomac Conference was to integrate the two programs.

Newell took exception to Hoogstraten's comments. "Barth, I think you ought to retract your statement that the Div. of Cancer Treatment is a haphazard, willy-nilly thing."

"Well, I talk to people like that because then I get a reaction," Hoogstraten said. "If I am too mild, then I do not get a reaction."

One NCI executive who attended the entire 2½ days of the conference, agreed that the advice conferees had offered Rauscher and NCAB could be summed up: It is conceivable for effective coordination to be brought about; it can be brought about without moving the cooperative groups into DCT; and that is at least "a reasonable intermediate position."

WORKSHOP MEETING SET FOR SEPT. IN CHICAGO; PLANNING GRANT OK'D

The Assn. of Community Cancer Centers is planning its second general meeting–workshop of the year for September in Chicago. The first, February in Washington, drew an enthusiastic attendance of more than 150.

One of the Chicago workshops will feature nursing oncology – what nurses can do and how they can help a cancer program in a community setting. Other workshops are tentatively scheduled on tumor registries and "grantsmanship."

NCI has informally told ACCC that its planning grant has been approved for developing ways community physicians can cooperate in clinical investigations with comprehensive cancer centers. James Donovan, ACCC president, will be the principal investigator, and Charles Cobau, Toledo, will be the administrator.

James Hockstadt, West Coast Cancer Foundation, has been named ACCC treasurer by the Board of Directors, replacing Simeon Cantril, who resigned when he accepted a position with NCI (***The Cancer Letter***, May 30). Cantril was secretary-treasurer, and the board decided to split the positions; a new secretary has not yet been named.

NEW MEXICO, MICHIGAN WIN SATURATION PROGRAM IMPLEMENTATION CONTRACTS

The Univ. of New Mexico Cancer Research and Treatment Center and the Michigan Cancer Foundation were the successful competitors for Phase II implementation contract awards in NCI's "community saturation" program.

The Div. of Cancer Control & Rehabilitation is negotiating with both groups, and the awards are tentative pending outcome of those negotiations.

The five-year contracts will range from $300,000 to $1.5 million per year.

Unsuccessful proposers were the Wilmington, Dela., Cancer Network; Utah Cancer Coordinating Council; and the Florida Children's Medical Service-Florida Dept. of Health.

SOURCES SOUGHT

The following synopsis concerns studies planned by Enviro Control Inc. under its prime contract with NCI for the Smoking & Health Program. The firm is compiling a list of organizations capable of conducting these studies. No response deadline has been established. Contact Enviro Control, not NCI.

Title: *Inhalation bioassays of cigarette smoke*

Conduct cigarette smoke inhalation studies in suitable animal models. Primary interest is in pulmonary and cardiovascular effects of inhaled cigarette smoke.

Epidemiological studies have linked cigarette smoking with certain respiratory and cardiovascular diseases. One approach to decreasing the health risks of smoking is to develop a less hazardous cigarette which is a major objective of the Smoking & Health Program. Inhalation bioassays are used to determine the effects of modifying tobacco composition.

Detailed information should be provided on past experience, laboratory facilities and expertise of personnel. Multiple requests for proposals may result from this sources sought synopsis.

William Metscher, Enviro Control, Inc.
1530 E. Jefferson St., Rockville, Md. 20852

FIRST FORMAL CREG GUIDELINES PUBLISHED ALONG WITH REGULATIONS

Formal guidelines for the first round of Cancer Research Emphasis Grants were released this week, following publication last week in the *Federal Register* of regulations governing the program.

The title, project number and program description of each CREG announcement are published here, along with instructions on how to respond.

Additional background material is contained in the June 1 issue of *NIH Guide for Grants & Contracts*, available from NIH.

Also included here is the announcement which appeared in the May 28 issue of the *Federal Register*.

Title – REPLICATION OF RNA TUMOR VIRUSES (DCCP-1)

Included under this topic are the structure of viral RNA; the mechanism of transcription of viral RNA to DNA including the action of viral RNA dependent DNA polymerase; the mechanism of integration of viral DNA into the host DNA; the structure of integrated viral DNA; the transcription of integrated viral DNA to viral RNA and other areas directly relevant to the replication of viral nucleic acids. The process of viral penetration into the cell and the synthesis and assenbly of viral proteins are not to be included.

Title – GENETICS OF RNA TUMOR VIRUSES (DCCP-2)

This will include the isolation and characterization of mutants of RNA tumor viruses as well as studies on the mechanism of action of viral genes. Particular emphasis should be placed on the role of viral genes in malignant transformation. Also included in this area of research is the identification and characterization of host cell genes that affect viral functions.

Title – IN VITRO CHEMICAL CARCINOGENESIS (DCCP-3)

The objective of this research is to study the interaction of chemical carcinogens and mammalian cells in vitro with particular emphasis on the following problems:

(1) Development of new model systems for neoplastic transformation induced by chemical or physical agents including consideration of the use of human and non-human primate cells.

(2) Development and/or refinement of methodology for the early identification and quantitation of neoplastic transformation of cells in culture using new biochemical, cytological or immunological markers (relative to identification of transformation) in established systems.

(3) Development and characterization of new approaches for metabolic activation systems for carcinogens and procarcinogens which can be applied to existing in vitro neoplastic transformation systems.

Title – EPIDEMIOLOGY OF CANCER OF THE ESOPHAGUS (DCCP-4)

Large geographic variations in incidence and mortality rates of this disease indicate that environmental factors are most likely involved. Some factors that have been considered as possible etiologic agents include the use of alcohol and tobacco, consumption of hot foods and beverages, heavy seasoning of foods, chewing of betel nut, Plummer-Vinson syndrome, radiation exposure from natural sources, exposure to asbestos, air pollution, trace metal deficiencies, vitamin C deficiency, contamination of food with silica particles, and consumption of tannin-rich foods.

Investigators may propose either a retrospective or a prospective approach to this problem. Populations at low or high risk for esophageal cancer should be identified for study of all factors potentially associated with this disease. Plans for data analysis should also be included in the proposal.

Title – FREQUENCY OF CANCER IN GENETIC ISOLATES (DCCP-5)

Certain cultural units in the United States have a low frequency of cervical cancer, attributed to high standards of personal hygiene. In one identified group, three cousins with Hodgkin's disease have been reported and many familial syndromes of birth defects and immune defects have been recognized with ease among the members of this group. Subsequently, patients with these syndromes have been recognized in the general population where they would have long been ignored because of their scarcity.

The cancer experience in other genetic isolates or unique communities of people, is poorly documented. Groups are often well-studied by geneticists who take biologic specimens for genetic markers. Little additional expense would allow collection of history, clinical and biologic specimens relating to carcinogenesis.

Title – RISK OF HUMAN CANCER IN HETEROZYGOTES WITH RECESSIVE MUTANT GENES PREDISPOSING TO CANCER IN THE HOMOZYGOTE AND HEMIZYGOTE STATES (DCCP-6)

This research would define the frequency of neoplasia among relatives of patients with recessively inherited conditions that predispose to malignancy, such as Fanconi's anemia ataxia telangiectasia, xeroderma pigmentosum, Brution's agammaglobulinemia, Wiskott-Aldrich syndrome, Ruthmund-Thomson syndrome, albinism, testicular feminization, and familial hemochromatosis.

Title – IS HODGKIN'S DISEASE A COMMUNICABLE DISEASE? (DCCP-7)

The study design should stress the methodologic aspects of choosing comparison groups that would generate reliable expectations for case to case and case to "carrier" to case contacts with which to compare to that observed. Accommodation of the influences of age, latent period and pathophysiology should also be incorporated.

Title – ASSESSING THE EFFECTS ON OFFSPRING OF PRECONCEPTION AND IN-UTERO IMMUNOSUPPRESSION (DCCP-8)

Such a study should assess the effects on fertility, fetal wastage, congenital defects and disease in the offspring. Immuno-suppressed persons have a markedly and uniquely altered risk of malignancy. The influence of immune suppression on products of conception may provide valuable insights into the preconception and in-utero determinants of cancer.

Title – LONG-TERM HEALTH SEQUELAE OF ESTROGEN REPLACEMENT THERAPY (DCCP-9)

This project would seek to determine the long-term health effects of estrogen replacement therapy in menopausal women, with particular emphasis on mortality from all causes and the incidence of cancers of the breast, endometrium and colon.

Title – SURVEILLANCE FOR DRUGS THAT MAY BE CARCINOGENIC (DCCP-10)

This research would seek to uncover previously unsuspected drugs associated with cancer, and follow up these leads with analytic studies. This calls for the establishment of a resource with access to large numbers of cancer patients and controls, that would systematically evaluate lifetime drug histories and collect data to control for ptoential confounding variables.

Title – DEVELOPMENT AND STUDY OF THE AVIAN MODEL FOR OVARIAN TUMORS (DCCP-11)

The purpose of the study is to provide a model with a high natural frequency of ovarian cancer (ovarian cancer is a main cause of death in old chickens), and which progresses from prodromal through subclinical through overt disease in a relatively short time span (ovarian tumors are prevalent in chickens greater than 2 years of age and reach a peak around 3 years).

Title – CANCER EPIDEMIOLOGY IN COLLABORATION WITH THE NCI PROGRAM OF CANCER SURVEILLANCE, EPIDEMIOLOGY AND END RESULTS (SEER) (DCCP-12)

The SEER program provides information on trends in the incidence of the various forms of cancer in the United States, variation in the occurrence of cancer

among different population groups and in different geographic areas, changes in diagnostic and treatment practices, and the associated end results in the general run of cancer patients. Data are obtained from a selected number of population-based cancer registries that provide uniform information on a continuing basis and participate in ad hoc studies designed to identify and assess etiologic and prognostic factors.

Only limited pilot or feasibility studies can be supported under the present contract agreement with the participating registries. Therefore, NCI is now soliciting CREG proposals for full-scale comprehensive research efforts on the epidemiology and etiology of all types of cancer, and especially research which may lead to identification of factors which can be modified to reduce the incidence and mortality of cancer. Although specific research protocols are requested, the actual approaches and methods will be left to the initiative of the applicants. Studies may be either retrospective or prospective in design.

Title – BEDSIDE APPROACH TO THE ETIOLOGY OF CANCER (DCCP-13)

New clues to the etiology of cancer will be sought at the bedside through deeper-than-usual family and personal histories. For this reason the information should be obtained under the supervision of a medical specialist with an aptitude to think etiologically. The information collected should concern previous major diseases in the patient and his family, as described in a pedigree, and a description of occupational and other environmental exposures of the patient.

The quality of the proposal submitted will be judged by its feasibility and by the applicant's comprehension of etiologic aspects of clinical oncology. The stress of the application should be on clinical astuteness, and not on data routinely collected by extensive formal questionnaires. It is anticipated that departments of pediatrics or internal medicine will be effective settings for supplementing histories as they are routinely obtained.

The principal investigator will be expected to identify for such histories, patients who seem to have a high probability of yielding information that will reveal something new about the origins of neoplasia. Some indication should be given in the application as to how new clues developed by bedside observations would be further explored. Progress will be judged on the basis of publications concerning the findings made.

Title – CELL KINETICS (DCT-1)

Studies may focus on one or more of the following areas:

(1) Studies are to be performed in animals comparing the kinetic behavior of critical normal host tissues such as bone marrow, gut, and skin, with that of experimental tumors prior to, during and following the administration of antineoplastic agents that are either of proven clinical value or have been determined to be promising in NCI screening systems or Phase I clinical trials.

The choice of model experimental tumor systems is discretionary, provided that the experimental systems employed are or can be well characterized with respect to their kinetic behavior. Minimum studies on the experimental tumor systems should include growth curves and measurement of tritiated thymidine-associated paramenters. Other established techniques may include cell survival, host survival, DNA content distribution studies, studies measuring tritiated thymidine-specific activity in DNA, and morphologic studies. New techniques, assay systems, and cell kinetic paramenters may be developed and evaluated in comparison with more established methods.

(2) Studies are to be carried out in experimental animal systems to explore optimal relative dosages and intervals in single drug multiple dose schedules, two drug combinations, and/or combinations of radiation therapy and drugs.

(3) Detailed studies of kinetic interactions among drugs and/or drugs and radiation will be carried out in vivo and/or in vitro to explore basic kinetic, biochemical, pharmacologic, pharmacokinetic, or other mechanisms of such interactions, in order to determine if observations made in a particular test system have broad applicability in other experimental systems and in man.

Title – INVESTIGATION OF CANCER RESEARCH INFORMATION TRANSFER MECHANISMS (OIA-1)

This project will investigate how information (including numeric data) needed for efficient and effective research is transferred and exchanged between cancer researchers (including research clinicians) and how the information transfer process in both basic and clinical areas of cancer research can be improved. The specific types of research projects which will be considered to be responsive are:

(1) Research projects involving user studies directed toward identifying in a quantative way, the information and data needs of researchers and research clinicians in specific areas of cancer research. In some cases, the proposed project might include the identification of existing successful methods of indexing, coding, processing, retrieving, reporting, disseminating, and exchanging information which could be applied or modified to meet the identified user needs. When possible, projects should include an experimental trial or development and testing of a pilot system using the selected method(s) along with a careful evaluation of the feasibility, cost, and potential usefulness of the selected method(s).

(2). Research workshops directed toward obtaining a consensus of specialists regarding the most important and significant items of data that should be collected in specific cancer research areas. This would include identification of the optimal number and type of data items that should be collected on patients with

specific types of cancer who are treated at multiple centers throughout the U.S. and other countries. These workshops should also identify the specific types of reports containing the collected data items that would be most useful to other specialists working in the same cancer research area.

(3) Research projects designed to identify the most productive and effective mechanisms currently used for transfer of information between individual cancer researchers, and from basic researchers to clinicians engaged in cancer research. This would include studies leading to the identification of key items of information that resulted in significant progress or breakthroughs in the cancer area and how the researcher became aware of and actually used those items of information. Provision must be made in research projects of this type for using the results of the research to develop a set of recommendations for improving information transfer mechanisms used by cancer scientists.

Title – ROLE OF GLYCOPROTEIN SHEDDING FROM MAMMARY CARCINOMA CELLS IN THE SPREAD OF METASTASIS (DCBD-001)

Mammary carcinoma cells of murine origin have been shown to possess high molecular weight glycoproteins on their surface, and some of these glycoproteins are closely related to human blood group N antigen. A large amount of this material may be released into the circulation, and the ability of some tumors to metastasize appears to correlate with the degree of glycoprotein dissociation from the plasma membrane. The presence of these glycoproteins on the cell membrane may mask surface histocompatibility antigens. Supporting this hypothesis is the finding of a loss of strain specificity in a subline of mammary carcinoma shedding glycoproteins, while another subline of the same tumor, which does not release surface glycoproteins, maintains strain specificity.

On the other hand, the shedding of membrane-bound antigens into the circulation may provide the neoplastic cells with an escape route from the immunosurveillance system of the host and thus be a determining factor in metastasis dissemination. Any approach to the analysis of this problem area is of interest provided it may have some relevance to the human disease. Cell populations derived from human mammary carcinomas, maintained in vitro, transplantable and metastasizing in nude-athymic mice are available for participants in the Breast Cancer Task Force Program.

Title – METHODOLOGY FOR PERFORMING MASS RADIOMAMMOGRAPHY WITH LESS THAN 150 mR PER EXPOSURE (DCBD-002)

This project would explore the feasibility, development and evaluation of methods for performing mass radiomammography, equal or better in resolution, definition and ability to detect cancer to present radiomammographic equipment, but with a reduction in radiation dose to the skin to less than 150 mR per exposure.

APPLICATION REQUIREMENTS

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

2. THE APPLICATION – Applicants should propose an individual project. Applicants may elaborate 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 support is requested. It is anticipated that the project period will not exceed three years.

3. SUBMISSION – 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 and number, and the date of publication as the one to which the application responds. Mail the application and letter to Div. of Research Grants, NIH, Bethesda, Md. 20014.

4. RECEIPT DATE – Applications must be received in the Div. of Research Grants no later than Oct. 1, 1975, in order to be considered in the competition under this announcement.

REVIEW

Upon receipt, applications will be reviewed by DRG and NCI staff for responsiveness to this announcement. If an application is judged unresponsive, the applicant will be given an opportunity to withdraw the application or to submit it for consideration in the traditional grant programs of NIH. Applications judged responsive will be reviewed initially for scientific merit by DRG study sections, and secondly by the National Cancer Advisory Board.

CANCER RESEARCH EMPHASIS GRANTS

(From the Federal Register, May 28, 1975)

The National Cancer Institute will establish grant-supported Cancer Research Emphasis Grants programs (CREG) to promote research in areas of concern to the National Cancer Program. The purpose of CREG programs is to promote cancer research in areas where (a) knowledge gaps are not being sufficiently addressed by on-going research, (b) there is a need for independent efforts to verify and corroborate on-going research, or (c) there is a need to stimulate or intensify effort in promising research areas.

Research areas and research projects suitable for CREG will be identified by NCI with the help of outside consultants and advisory groups.

The general characteristics of the CREG program include the following. NCI Program Directors will develop a detailed statement announcing the purpose, objectives, rationale and significance to program goals for each research project area which is appropriate for CREG. Each announcement will contain a date for receipt of applications for the specific program area.

The approaches and methodology will be left to the creativity and initiative of the scientists who apply. Direction of the research or technical supervision by NCI will be neither necessary nor desirable. Cancer Research Emphasis program announcements will be published in the NIH Guide for Grants & Contracts and in other appropriate publications. The NIH Guide for Grants & Contracts may be obtained from the Div. of Research Grants, NIH, Westwood Bldg., 5333 Westbard Ave., Bethesda, Md. 20016.

CREGs will be awarded only to nonprofit organizations and institutions, state and local governments and their agencies, authorized federal institutions and, occasionally to individuals, in accordance with NIH and PHS policy. Receipt, review and referral of applications will be accomplished according to the policies and procedures contained in 42 CFR Part 52 and the Public Health Service Grants Policy Statement which may be purchased from the Supt. of Documents, U.S., Washington, D.C. 20402.

Investigators will send applications to the Div. of Research Grants (DRG) on NIH Form 398 and must identify in a covering letter the single CREG announcement to which the application responds. The DRG referral officer with the NCI program director will determine if the application is responsive or unresponsive to the announcement. An applicant whose application is judged unresponsive will be notified by DRG and will be given the opportunity to withdraw the application or submit it for consideration in the other grant programs of NIH.

Competitive applications may elaborate on the statement of purpose, objectives, rationale, and significance contained in the soliciting announcement, and the applicant must complete portions of the application pertaining to procedural details, the investigator's research experience, facilities available, specific budgets for all years of support requested, and biographical sketches for professional personnel.

Applications will be reviewed in accordance with the normal peer review system of NIH utilizing the study sections of DRG. Applications with direct costs in excess of $35,000 will receive a secondary review by the National Cancer Advisory Board.

NCI program directors will have authority and responsibility for monitoring scientific progress and administration of CREGs. Each year, preceding the anniversary date of the award, the investigator will submit a comprehensive scientific report as an integral part of his noncompetitive continuation application. More frequent reports may be requested in the announcement.

If the research is to be continued, applications for renewal beyond the project period as defined in appropriate CREG announcement must be competitively reviewed by study sections. Program directors must notify grantees 12 months before a project period ends whether or not the specific CREG program is to be continued. If the program is to be continued, the program director will prepare an announcement for publication in the NIH Guide. If the program is to be discontinued, grantees may, of course, respond to other published announcements or apply for a regular research grant.

For further information contact the director, Div. of Cancer Research Resources & Centers, NCI, Bethesda, Md. 20014.

CONTRACT AWARDS

Title: Synthesis of derivatives of carcinogenic polycyclic hydrocarbons
Contractor: Univ. of Chicago, $84,715.

Title: Technical writing services in support of cancer related inquiries
Contractor: Biospherics, Inc., $274,932.

Title: Program planning, evaluation and related support services for the Div. of Cancer Control & Rehabilitation
Contractor: JRB Associates, Inc., $867,038.

SOLE SOURCE NEGOTIATIONS

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

Title: Study of purification of epidermal chalone, a tissue inhibitor of cellular proliferation
Contractor: Univ. of Michigan

Title: Study the etiology of medulloblastoma and other brain tumors
Contractor: Childrens Hospital, Cincinnati

Title: Services in support of carcinogenesis bioassays
Contractor: Microbiological Associates

Title: Study of chemically induced carcinogenesis of the pancreas
Contractor: Boston Univ.

Title: Oncology nursing program in community hospitals
Contractor: Waterbury Hospital Center, Waterbury, Conn.

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