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CANCER EPIDEMIOLOGY HAMPERED BY BUREAUCRATIC DELAYS, LACK OF COOPERATION, NCI GROUP SAYS

Bureaucratic delays by HEW and the Office of Management & Budget, lack of cooperation from the Social Security Administration and the Internal Revenue Service, inadequate review by the NIH Div. of Research Grant study sections, and several difficulties within NCI

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In Brief

ILLINOIS COMPREHENSIVE CENTER CORE GRANT APPROVED, PROBABLY WILL BE FUNDED IN FY 79

ILLINOIS CANCER Council, the only recognized comprehensive cancer center which has never received a core grant from NCI, had its core grant application approved last week by the National Cancer Advisory Board. The grant was given a medium range priority score and is not absolutely assured of funding. However, unless the FY 1979 NCI appropriation is severely cut from the level now estimated ($925-930 million), it appears the ICC grant will be funded. . . . **JANE HENNEY** has moved from the Div. of Cancer Treatment's Clinical Investigations Branch to DCT Director Vincent DeVita's office. She replaces Brian Lewis as DeVita's special assistant for clinical affairs. Lewis has moved to the Medicine Branch as a clinical investigator. . . . **CORRECTION:** DCT Deputy Director Saul Schepartz was incorrectly quoted by *The Cancer Letter* (Sept. 8) when asked by NCI Director Arthur Upton if it were possible to generalize that all cytotoxic drugs are carcinogenic. Schepartz answered, "You can say that for the alkylating agents, but certainly not for antimetabolites". . . . **DONALD PINKEL**, director of the Midwest Children's Cancer Center, and Robert Gallo, chief of NCI's Laboratory of Tumor Cell Biology, shared the Frederick Stohlman Memorial Award for contributions in leukemia research. . . . **DIAGNOSTIC ONCOLOGY** for the Clinician is the subject of a UCLA course in continuing education Oct. 28-29. Use of newer imaging modalities for the diagnosis and staging of cancer patients will be featured. Contact Dept of Continuing Education in Health Sciences, UCLA Extension, PO Box 24902, Los Angeles 90023, phone 213-825-7257. . . . **CANCER AND MEDICINE 1978**, continuing education course Nov. 16-18 at the Univ. of Kentucky in Lexington, will include sessions on breast and colon-rectal cancer, leukemia, lymphoma and melanoma. Contact Joy Greene, College of Medicine, Univ. of Kentucky, Lexington 40506. . . . **SECOND INTERNATIONAL** Conference on Inorganic & Nutritional Aspects of Cancer is scheduled for Jan. 3-5 in La Jolla. It will present recent advances in metal carcinogenesis, cancer epidemiology, theoretical aspects of carcinogenesis, metal complexes as anticancer drugs, occupational cancers, trace minerals, and cancer prevention. Contact G.N. Schrauzer, Dept. of Chemistry, Univ. of California at San Diego, Revelle College, La Jolla 92093.

"ADVANCING ON SOME FRONTS, RETREATING ON OTHERS," FRAUMENI REPORTS TO NCAB

(Continued from page 1)

were all listed as major problems hampering cancer epidemiology, an NCI Epidemiology Program Working Group has reported.

Joseph Fraumeni, chief of the Environmental Epidemiology Branch in NCI's Div. of Cancer Cause & Prevention, presented the working group's report to the National Cancer Advisory Board last week.

"One of our first recommendations to Dr. Upton was that all steps be taken to preserve and utilize for epidemiologic studies the national data resources that are available both within and outside the National Cancer Program," Fraumeni said. "At present we are advancing on some fronts but retreating on others. For example, within the institute, a large bladder cancer study has begun in collaboration with the population based cancer registries of the SEER program, to evaluate the role of saccharin and other possible risk factors in the origin of this tumor.

"The Breast Cancer Detection Demonstration Project in the Div. of Cancer Control is providing us with information that may help to identify new risk factors for breast cancer. The therapy trial programs of the Div. of Cancer Treatment are being monitored for new tumors that may be related to treatment.

"Outside the National Cancer Program, progress is being made to establish a national death index at the National Center for Health Statistics, that will provide a means for determining rapidly whether a particular individual in a follow up study has died, and will direct the epidemiologist to the death certificate giving the cause of death. This will short circuit the usual cumbersome and expensive process of tracing individuals, and will allow many more studies to be carried out in the future.

"However, with the increasing emphasis on privacy access to other resources is being restricted," Fraumeni continued. "There is a gold mine of information in the Social Security Administration for occupational studies, and initiatives need to be taken to utilize the routinely collected information. The Internal Revenue Service now denies us access to address file searches (that have been so helpful in the past) for followup studies. We have been trying for some time to develop a collaborative epidemiology program with the Veterans Administration, and some light has recently appeared at the end of the tunnel.

"Although the concerns for confidentiality are genuine and must be respected, we are worred that complete privacy will virtually eliminate the epidemiologic research needed to uncover the causes of disease, including cancer.

"To improve coordination and efficiency of effort in tapping these outside resources, we recommended to Dr. Upton the establishment of a separate working party of NCI experts on data resources who would compile and exchange information, develop contact points with other agencies, and formulate plans and proposals for interagency collaboration. The group was formed and already has made tremendous headway. It is chaired by Dr. Gil Beebe, and includes Drs. Bailar, Decoufle, Mason, and Pollack."

Fraumeni said that another major concern of the group relates to the "excessive delays and complexity in initiating epidemiologic studies, particularly when the problem is urgent and needs to be studied quickly. As the situation stands, we must wait a number of months for clearance of questionnaires and other forms from various levels of HEW and the Office of Management & Budget before it is possible to conduct any interviews of cancer patients by intramural or contract-supported groups."

"Dr. Burton of our staff has identified the steps involved in obtaining this clearance. The forms move from the branch to the NIH reports clearance officer, to the HEW reports clearance officer, and then to the Assistant secretary of Health. From HEW the forms go to OMB. If the study is interpreted as a statistical survey, additional reviews are obtained from the National Center for Health Statistics and the Dept. of Commerce. The forms then receive an OMB number, and make their way back through channels to the NIH reports clearance officer.

"We believe that in some situations an exemption should be given to permit a bypass or short circuiting of the usual channels for review, so that environmental hazards can be detected as quickly as possible. Such exemptions are the rule for epidemic diseases of an infectious nature, and we feel that they should at least be the rule for diseases such as cancer when a continuing environmental threat is suspected."

The problems involved in review of epidemiology grant applications continue to vex NCI.

"The largest proportion of regular research grant applications are reviewed and rated by the Epidemiology and Disease Control study section which is administered by the NIH Div. of Research Grants," Fraumeni said. "The proposals must display refined epidemiologic and biometric planning. Judgments on the value of the cancer science are often made by one or two individuals who may have little understanding of the substantive issues under study.

"At the other extreme are the NCI review committees, such as the one that evaluates epidemiology program projects, which is heavily oriented toward cancer; however, the expertise is primarily in therapy and basic mechanisms rather than epidemiology. In addition, at least 13 other committees review NIH epidemiology project applications for scientific merit. It is not surprising that the diversity of review panels often results in unequal assessment of merit.

"Another problem is the scarcity of qualified cancer epidemiologists who are in heavy demand as consultants and reviewers by the large number of

committees and review groups. The many review committees may also promote dual application and an inflated review load. In addition, the existing committees are not well constituted to evaluate epidemiologic proposals that utilize laboratory tools.

"We are in need of innovative multidisciplinary projects, and should improve the mechanisms for adequately reviewing such applications. We also see a need for closer scrutiny by peer review of the intramural research program.

"As a result of these concerns, we recommend that the new Board of Scientific Counselors in the Div. of Cancer Cause & Prevention include strong representation in epidemiology and biometry, and carry responsibility for concept and merit review of intramural research in epidemiology. We also recommend that the current Biometry & Epidemiology Contract Review Committee in the Field Studies & Statistics Program be retained, transferred to the new Div. of Extramural Activites, and be responsible for reviewing all NCI contract proposals involving epidemiologic research, not simply those originating from Field Studies & Statistics.

"Finally, we recommend that consideration be given to the formation of a new Cancer Epidemiology Review Committee located in the NIH Div. of Research Grants. This committee would be responsible for all research and training grants in cancer epidemiology, including regular research grant applications R01s), program project applications (P01s), developmental grant applications (P20s), organ site epidemiologic studies (R26s), and collaborative epidemiologic studies and trials not associated with cooperative therapy groups (R10s). Conference grant applications and training awards dealing with epidemiology might also be reviewed by this committee. The research applications would cover a variety of topics including descriptive and analytical epidemiology, biostatistical methodology, population and clinical genetics, multidisciplinary etiologic studies with a substantial epidemiologic component, and experimental intervention projects.

"We would suggest that applications stemming from targeted programs (e.g., organ site and RFA responses) be reviewed by the sponsoring program or working group for relevance. For particular proposals the program group could be given the opportunity to recommend scientific expertise in disciplines that might not be adequately represented on the review committee, and might offer the names of several qualified individuals to cover any gaps.

"We suggest that these two committees—one responsible for contracts and one for grants—be represented by a similar mix of disciplines. Several members would be expert in the epidemiologic and biometric approaches to cancer. Others should come from related fields of infectious disease, pathology, human genetics, endocrinology, clinical oncology, and carcinogenesis. It would also be desirable if some members had a background in nutrition, immunology, and behavioral sciences, but we recognize that supplemental expertise in these and other areas could be recruited on an ad hoc basis. The committee members should be carefully selected in a way that will not only insure high quality science, but also provide an atmosphere that encourages the development of new approaches and the fostering of multidisciplinary studies.

"Although we believe it would be desirable to consolidate all NCI epidemiology review into one grant and one contract review committee devoted to cancer epidemiology, the current restrictions on committee chartering may require a compromise. One option would be to form a DRG epidemiology review committee responsible for applications for a limited set of institutes viewed as having relating interests to NCI, including NIEHS, NIA, NICHD, and possibly NIOSH. Another option would be to develop a subcommittee structure for the Epidemiology and Disease Control study section, with its membership enlarged and reorganized for more appropriate review of cancer proposals.

"One of the major limiting factors in epidemiologic research today is the scarcity of trained epidemiologists throughout the country," Fraumeni said.

"We have contributed to the NIH Epidemiology Committee that has prepared recommendations directly to Dr. Fredrickson. One concerns the development of a new program called NIH Associates in Epidemiology. In this program about 25 young physicians and others at the doctoral level would be recruited annually to NIH for a program of research and formal training lasting two to three years. These people would be assigned for job experience to the various institutes and other health agencies within HEW. In addition, a series of suggestions was drafted to promote extramural training in epidemiology at the NIH level.

"We are now considering steps that NCI can take directly. Since epidemiology is generally considered to be a shortage area, should there be a policy of selective funding for personnel development in epidemiology? In especially short supply are physician-epidemiologists; special educational programs are needed to enhance recruitment of medical students and physicians being trained in more traditional fields. We feel that the formal training of epidemiologists must not take place in isolation but in the context of a productive research environment. In various parts of the country, the training centers and the cancer research programs should be brought closer together, for the affiliations would work to the advantage of both groups.

"Although we may be biased, we feel that the impact of epidemiology in the institute is not as great as it might be. We feel that epidemiologic findings

should have a greater influence on steering experimental research, in planning intervention studies, and setting administrative priorities. The opportunities for epidemiologic research at NCI are unique. The intramural epidemiology program has expanded recently, but still needs strengthening in several areas.

"As with our study of bladder cancer, new collaborative projects need to be developed in collaboration with members of the SEER units, the Epi-stat units at various cancer centers, and with several federal and state agencies. Together with grants program, we should insure that all cancers are subjected to case control studies and that none be neglected. Further research is needed to uncover the environmental causes of cancer in high risk communities by our county-by-county survey of cancer mortality.

"In the absence of an alternative, NCI should serve as the focus for studies of drug induced cancer at the federal level, including efforts to clarify the carcinogenic potential of hormonal, cytotoxic, and immunosuppressive drugs. Our program in radiation studies should be enlarged to help identify the effects of low level exposures. Occupational studies should be expanded to assess the carcinogenic influence of chemical and physical agents in the workplace, including those agents that the bioassay program finds are carcinogenic to laboratory animals.

"Nutritional studies are now a weak component of our intramural program and need attention. We need more studies to evaluate the effects of general environmental pollutants, such as agricultural chemicals and water contaminants. Host factors should be given a high priority, and multidisciplinary projects developed with our laboratory colleagues to clarify the role of candidate viruses, metabolic factors, and genetic susceptibility. Whenever possible, interagency collaboration should be pursued to evaluate urgent issues, including those of immediate regulatory concern.

"In the area of biometry, the SEER Program is now under evaluation by the Norris Cotton Cancer Center at Dartmouth Univ.

"We plan to explore alternative means of achieving, more inexpensively and efficiently, the objectives of the SEER Program. Efforts are also being taken to strengthen the research capabilities of the SEER units. We are also looking into the Centralized Cancer Patient Data System, and hope to achieve closer coordination of this resource with the SEER Program.

"The Biometry Branch has pioneered in the area of statistical methodology, but further work is needed in the following fields—cancer surveillance to rapidly identify incidence patterns that may reflect environmental hazatds; the development and testing of multicause and multistage models of carcinogenesis; the statistical issues in extrapolating results from animal experiments to man; the comparison of observational data on survival following cancer treatment with the results one might obtain from randomized clinical trials; and possibly developing a focus for designing and evaluation of prevention programs, while improving the methodology for quantifying these efforts.

"Although the major part of the NCI epidemiology program is located in the DCCP, there is a considerable amount of epidemiologic activity in other parts of the institute. Our group would like to see a more coordinated approach that would provide the following—regular communication and exchange of ideas; more concerted responsibility for action on matters of policy and regulations (e.g., privacy legislation, manpower needs, OMB clearance); an advisory resource in epidemiology and biostatistics for research throughout the National Cancer Program; a stimulus of multidisciplinary interaction with various programs of the institutes; and improved communication and joint activity with epidemiologic programs that are growing in other agencies. Toward this end, our group might be considered an analog toward establishing a more substantial interdivisional group concerned with cancer epidemiology," Fraumeni concluded.

DCCP Director Gregory O'Conor emphasized the need for a new DRG study section and suggested that an NCAB recommendation might help. But Thomas King, director of the Div. of Extramural Activities which is now responsible for NCI review functions, pointed out the lack of success NCI has had with such requests. "NCI is asking DRG for a new carcinogenesis study section, a therapy study section, and now an epidemiology study section," King said. "At some point we're going to get a cold shoulder on these requests."

It would seem that the cold shoulder has already been extended. DRG earlier this year assured NCI that the environmental carcinogenesis study section had been approved all the way up the line to HEW and that it would be only a matter of weeks before it would be established.

The DRG line now is that carcinogenesis cuts across so many of the existing study sections that a new one is not really necessary. NCI has argued that none of the existing ones include the expertise to provide fair review of carcinogenesis applications, and that this has been a major deterrent to expansion of environmental carcinogenesis studies.

NCAB member Philippe Shubik noted that the NCAB's request for a carcinogenesis study section included a strong representation for epidemiology.

NCAB REJECTS AUTOMATIC COMPREHENSIVE WITHDRAWAL ON FAILURE TO RENEW CORE

The National Cancer Advisory Board approved the concept that a comprehensive cancer center which loses its core grant may not be qualified to continue being recognized as "comprehensive." But the Board

rejected the suggestion of its Subcommittee on Centers (*The Cancer Letter*, Sept. 22) that failure to regain core funding would automatically, after two years, result in withdrawal of comprehensive recognition. The subcommittee had recommended:

"If a comprehensive cancer center loses its core grant and chooses to continue to be recognized as comprehensive, the center can re-apply for a core grant within two years. If the center fails to obtain a funded core grant within this period, or if the center decides not to re-apply for a core grant within two years, the center shall automatically cease to be recognized as comprehensive by the director of NCI."

The Board amended the recommendation to read:

(After the first sentence) "If the center fails to obtain a funded core grant within this period, or if the center decides not to re-apply for a core grant within two years, the center shall be re-reviewed at that time in order to be determined if it will continue to be recognized by the NCI director as a comprehensive cancer center."

William Shingleton, chairman of the Subcommittee on Centers, said that the amendment to the Subcommittee's resolution means that failure to maintain funding through a core grant "raises a flag" that a center is having problems and requires review by the Board on its status as a comprehensive center. Continued recognition as comprehensive would depend on the outcome of that review and not on its failure to obtain a funded core grant.

Board member Philippe Shubik objected to the suggestion that core grants are important indicators of a center's comprehensiveness, pointing out that funding through core grants was not one of the 10 characteristics adopted by the board for comprehensive centers. "Conditions for core funding are not necessarily the same as for comprehensive recognition," Shubik said. "Something adverse to gaining core grant funding may be irrelevant to a center's mission as a comprehensive center. I think we've got to consider if we want this as a criterion. If we want this as one of the characteristics, then let's say so."

"It's my feeling that this was the sense of the subcommitee's recommendation," commented Board member Henry Pitot.

Board member Denman Hammond pointed out that for "a given center, the core grant may represent 100% of the center; for others, it may represent only 10%. At some centers, the core offers an imprecise, distorted view of what the center is doing. It is inappropriate for core to be considered as essential to comprehensiveness."

Hammond said the 10 characteristics "provide one area of the centers program that is well defined. This has been the operational policy."

Hammond agreed that the "mechanics for derecognition is very important. Recognition means more if a derecognition mechanism is there and is used. But comprehensiveness deserves separate site visits. To tie it to approval of a specific grant is inappropriate."

After Pitot's amendment, which eventually was adopted with the resolution, was accepted by Shingleton, Hammond moved to table. He was supported by William Powers, Thomas Newcomb and Shubik, but the motion failed when opposed by Bruce Ames, Frederick Seitz, Morris Schrier, Gilbert Omenn, Pitot and Shingleton. The amended resolution then was approved with only Powers, Hammond and Shubik in opposition.

Centers Program Director William Terry suggested that, "while at the start there may have been excellent reasons for this Board to make recognition of comprehensive centers independent of funding, times now are different. Perhaps it is no longer reasonable to have the Board make recommendations to the director independent of the peer review process. That may be a reasonable function for the Assn. of American Cancer Institutes and perhaps the Assn. of Community Cancer Centers, to serve as accreditation bodies."

"The National Cancer Act gave that charge to the National Cancer Advisory Board," Hammond said. "Those organizations you are talking about would not touch it with a 10 foot pole."

"We haven't hit yet on the optimal methods for recognition and derecognition," said Cancer Panel member Paul Marks. "I feel strongly these resolutions by the subcommittee give us the flexibility and time to consider options."

The Board approved the Subcommittee's two other resolutions, providing that comprehensive centers will continue to be recognized as such until determined otherwise by the Board; and that mechanics for review for comprehensiveness will be determined by NCI staff and the subcommittee during the next year.

NOMINATIONS OPEN FOR BRISTOL-MYERS $25,000 AWARD FOR CANCER RESEARCH

Nominations are now being accepted for the second annual Bristol-Myers Award for Distinguished Achievement in Cancer Research, according to John Ultmann, director of the Cancer Research Center of the Univ. of Chicago and chairman of the Award Selection Committee.

The $25,000 award is made annually for outstanding contribution to cancer research. James and Elizabeth Miller, a husband-and-wife team of biochemists at the Univ. of Wisconsin's McArdle Laboratory for Cancer Research, received the first Bristol-Myers Award last spring for their pioneering research in chemical carcinogenesis.

The award winner will be selected by a five-member panel of judges from cancer research centers at Baylor, Chicago, Johns Hopkins, Stanford and Yale universities. Each of those schools participates in a $2.5 million grant program funded by Bristol-Myers to promote unrestricted, innovative cancer

research. Nominations will be accepted from medical schools, free standing hospitals and cancer research centers until Dec. 31, 1978.

Only one nomination from each institution will be accepted. For forms and further information, contact: Secretary, Award Committee, Bristol-Myers Co., 345 Park Ave., Room 43-30, New York 10022.

DECISION NETWORK VOTES 14-11 TO TEST LAETRILE IN PATIENTS; UPTON TO DECIDE

The Div. of Cancer Treatment Drug Decision Network Committee voted 14-11 to proceed with clinical tests of laetrile after hearing a report this week on the retrospective analysis of patients who had been treated with the controversial substance.

The final decision on whether to seek an IND for laetrile from the Food & Drug Administration will be made by Director Arthur Upton.

The close vote was unusual, according to Vincent Oliverio, who heads DCT's Developmental Therapeutics Program and is chairman of the Decision Network Committee. The group, which is made up of DCT clinical and drug development staff members, decides on each stage in the development of a new drug whether or not to move it along to the next stage. "We're usually unanimous in our decisions," Oliverio said.

"This leaves us right where we were before," said DCT Director Vincent DeVita. "Every time I've discussed laetrile with any group and then asked for a vote on whether it should be tested, they have always been divided."

Upton has at least two options, in addition to going ahead with clinical trials or dropping laetrile entirely: He could ask for another more detailed retrospective analysis, or he could seek advice from another group which would consider ethical and perhaps other issues. The Decision Network Committee decision was limited strictly to the technical question—Is there sufficient evidence in the 68 cases reviewed by the 12-member panel that laetrile may have produced positive responses to justify clinical trials?

"We asked the Decision Network Committee to consider the data on its merits, no more and no less," DeVita said.

The review of 68 cases was conducted as a blind review, with 26 cases of patients who received chemotherapy taken from NCI files added to the 68. Panel members did not know which was which.

Twenty-two of the laetrile patients were judged to be evaluable, and six of those showed positive response. Two—one with lymphoma and one with squamous cell bronchogenic carcinoma—had complete responses.

Irwin Krakoff, who served as chairman of the panel, described the review to the Decision Network Committee and answered questions. Neil Ellison, who as special assistant to NCI Deputy Director Guy Newell did the staff work for the panel, described NCI's efforts to locate patients treated with laetrile.

NCI mailed 455,000 letters to physicians, and received 1,954 responses in which the physician said he never used laetrile; 220 who said they had used it but results were unfavorable or showed no response; and 19 who said they had observed responses.

NCI sent out 529 patient packets, including 300 to pro-laetrile groups. Only 93 were returned. "I offered to go out with pro-laetrile groups to interview patients," Ellison said. "I said they could show me only their best cases. Not one offer to do that ever came from them."

All but 22 cases were judged nonevaluable because they had had other therapy. The panel could not be certain that the 22 had not had other therapy, which clouds the finding of six responders, but at least there was no evidence of it.

DeVita told the committee that if a clinical trial is undertaken, it would be a straight phase II trial and would not be given in combination with other drugs.

Committee member John Minna suggested that it might be better to start with a phase I trial, "since there is a question that adequate dose levels had been reached."

Committee member Richard Adamson commented that reasons for testing include "biological noise we have seen in some animal systems, not those in our screen;" if a negative result was found in clinical tests "it would be a validation of our animal systems." Reasons for not testing it would include, Adamson said, the fact that "we have seen only six responses out of what might be several hundred thousand cases; it has been negative in our animal systems; and is this a unique drug, or every time animal data is negative, will we have to test a drug when some pressure group demands it?"

"This group is a technical group. Don't deviate from those considerations," DeVita said. "Those other questions are valid, but I think we have to leave the social issue up to Dr. Upton."

REQUEST FOR RESEARCH GRANT APPLICATIONS: A PILOT STUDY OF CANCER PAIN

The NCI Div. of Cancer Control & Rehabilitation is inviting grant applications for developing and testing a methodology for determining the incidence and natural history of pain in cancer patients.

This type of solicitation (RFA) is utilized when the division wishes to stimulate investigator interest in a particular area that is important to the National Cancer Program. Unlike the request for proposals (RFPs), the RFA is supported through the customary NIH grant and is governed by the policies for investigator-initiated grants. All applications in response to the RFA will be reviewed by an appropriate peer re-

view group of NIH. Approved applications that receive grant awards will be administered in the same fashion as all NIH grants.

Applications should be prepared in accordance with the aims and requirements which are described in the following sections.

I. Program Specifications—DCCR is currently supporting several investigations into the mechanism and innovative treatment of cancer related pain. The purpose of this pilot study is to develop an effective methodology to determine the incidence and natural history of pain in cancer as a step toward an eventual goal of gaining an objective understanding of the overall magnitude of the problem of pain in cancer.

A review of pain and cancer literature, including computerized searches for references to cancer pain, reveal a relatively small number of papers devoted to the subject. The existing literature is insufficient to formulate an overall comprehension of the incidence, magnitude, and natural history of pain in cancer.

The intent of the RFA is to stimulate proposal from organizations wishing to participate in a cooperative pilot study of cancer pain with the goal of gathering valid data defining the incidence and natural history of pain in cancer. In their proposals applicants should present a program for developing and testing the methodology to determine:

A. The appearance of cancer pain during the course of the disease.

B. The relationship to stage or progression of disease.

C. The subsequent course of cancer pain.

Applicants should address all of the following points although support is not limited to items:

1. In view of the several complex variables which may influence a cancer patient's appreciation of pain, the main purpose of this pilot study is to define and validate an appropriate methodology including workable definitions, sampling techniques, test instruments, quantitative pain measures, etc., to gather the necessary data.

2. DCCR does not intend for this pilot study to address the frequency, time of appearance and progression of pain during the natural history of all cancers. Efforts concerned with the project objectives should focus on four cancers justified as appropriate for inclusion in a cancer pain study. As part of the proposal offerors must document existing knowledge of the frequency and consequences of pain for the four selected cancers.

3. In order to obtain sufficient and representative data across the natural history of a cancer it is anticipated that the submitted proposal may necessarily involve several cooperating instutions with provisions for central coordination and analysis of data.

4. The proposal should include a timetable for accomplishing the objectives of the study and for producing the draft and final versions summarizing the results of the pilot study.

Award of a grant under this solicitation to a given institution or organization neither implies nor guarantees favorable action on any subsequent application for a demonstration grant.

II. Method and Criteria for Review—Upon receipt, applications will be reviewed by the NIH Div. of Research Grants and NCI staff for responsiveness to this announcement. In 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 program of NIH. Applications judged responsive will be reviewed initially for scientific merit by an NIH peer review group and secondly by the National Cancer Advisory Board.

The following factors will be considered in evaluating each application.

1. Relevance of the proposal to the scope and objectives provided in this announcement.

2. The scientific merit of the proposed approach to the problem. In the technical review, attention will be paid to the following:

a. The referenced summary of information on cancer pain in the four index cancers.

b. Sampling methods for including patients in the study population.

c. Methods of assessing and quantifying pain.

d. Data management techniques.

3. Qualifications of the research team and organizations that will perform the study.

a. Background and qualifications of proposed staff—document with curriculum vitae, etc.

b. Experience in study design and data management.

c. Previous experience in pain research or pain management.

4. The cancer patient population and hospital or hospitals which will be involved in the study—documentation to include letters of endorsement from physicians, chief of service, hospital administration, etc.

III. Method of Applying—Each prospective applicant should submit a brief letter of intent to respond not later than Nov. 1, 1978. The application is due Dec. 1, 1978. Send letters of intent to Donald Buell, Program Director for Clinical Oncology, National Cancer Institute, Blair Bldg Room 6A03, 8300 Colesville Rd., Silver Spring, Md. 20910.

Such letters provide an indication of the number and nature of applications, are not binding, and will not enter into the review of any proposal submitted.

Applications should be submitted on Form PHS 398. The conventional presentation for grant applications should be utilized and the points identified under the Review Criteria must be fulfilled.

The standard procedures for submitting grant applications to DRG should be followed. A brief covering letter should accompany the application indicating that it is in response to the program announcement: "A Pilot Study of Cancer Pain." The words "Cancer

Control" should be typed in block letters in the upper right-hand corner of the first page of the application. A copy of the covering letter should be sent to Buell. Questions may be phoned to Buell, 301-427-8204.

ADVISORY GROUP, OTHER CANCER MEETINGS FOR OCTOBER, NOVEMBER

First International Congress on Hormones & Cancer—Oct. 4-6, Universita Cattolica del Sacro Cuore, Rome.
XIIth International Cancer Congress—Oct. 5-11, Buenos Aires.
Cancer Update—Symposium for Nurses & Other Health Professionals—Oct. 11-13, Birmingham.
International Symposium on Pituitary Microadenomas—Oct. 12-14, Milan.
Antonio Prudente Oncology Symposium—Oct. 12-15, Sao Paulo.
14th International Congress of Internal Medicine—Oct. 15-19, Rome.
Div. of Cancer Treatment Board of Scientific Counselors—Oct. 16-17, NIH Bldg 31 Room 10, 8:30 a.m. both days, open.
Div. of Cancer Cause & Prevention Board of Scientific Counselors—Oct. 17-18, NIH Bldg 31 Room 11A10, 9 a.m., both days, open.
President's Cancer Panel—Oct. 18, NIH Bldg 31 Room 7, 9:30 a.m., open.
6th Congress of the German Democratic Republic Society for Dermatology—Oct. 18-20, Dresden.
Virus Cancer Program Scientific Review Committee—Oct. 20, Landow Bldg Room A, open 9—9:30 a.m.
Assn. of Community Cancer Centers Regional Meeting on Community Cancer Programs—Reality, Not Rhetoric—Oct. 20-21, Stouffers Inn, Denver.
Swiss Cancer League and Swiss Society of Oncology— Oct. 20-21, Basel.
Workshop on Alcohol & Cancer— Oct. 23-24, NIH Bldg 31 Room 10, 9 a.m., open.
3rd International Tutorial on Neoplastic Hematopathology— Oct. 23-28, Geneva.
Clearinghouse on Environmental Carcinogens Chemical Selection Sub-Group— Oct. 24, Bethesda Holiday Inn, 9 a.m., open.
3rd Symposium on Problems of Leukaemia Aetiology—Oct. 24-27, Reinhardsbrunn Castle, Germany.
16th International Meeting of the Society of Nuclear Medicine—Oct. 24-27, Madrid.
Adjuvant Therapy in Solid Tumors—Oct. 25-26, Roswell Park continuing education in oncology; contact Claudia Lee.
Clearinghouse Experimental Design Subgroup— Oct. 25, Bethesda Holiday Inn, 9 a.m., open.
7th Biannual Meeting of the International Society of University Colon & Rectal Surgeons— Oct. 25-29, Kyoto.
Clearinghouse Data Evaluation/Risk Assessment Subgroup—Oct. 26, Landow Room A, 9 a.m., open.
Cancer Modality Treatment & Cell Proliferation—Oct. 26-28, Hungarian Cancer Society, Budapest.
3rd Chemotherapy Foundation Symposium—Oct. 27-28, Barbizon Plaza, New York.
Div. of Cancer Biology & Diagnosis Board of Scientific Counselors—Oct. 27-28, NIH Bldg 31 Room 11A10, open Oct. 27, 9 a.m.—5 p.m.
Div. of Cancer Control & Rehabilitation Advisory Committee—Oct. 27, Blair Conference Room 9 a.m., open.
Diagnostic Oncology for the Clinician— Oct. 28-29, UCLA.
Cancer Special Programs Advisory Committee—Oct. 30-31, NIH Bldg 31 Room 7, open Oct. 30, 9—10:30 a.m.
Pancreatic Cancer Working Group— Nov. 1, Regents Continental Hotel, Chicago, open 8:30—10 a.m.
Australian Cancer Society Biannual Meeting—Nov. 1-3, Adelaide.
23rd Annual Clinical Conference— Nov. 1-3, M.D. Anderson, Houston.
Clinical Cancer Education Committee— Nov. 1-2, Landow Room A, open 8:30—9:30 a.m.
Practical Aspects of Cancer Management—Nov. 5-7, Williamsburg, Va.
Cancer Clinical Investigation Review Committee—Nov. 6-7, NIH Bldg 31 Room 6, open Nov. 6, 9 a.m.—12:30 p.m.
Course on Cancer Epidemiology—Nov. 6-17, Sydney, Australia.
26th Annual Meeting American Society of Cytology—Nov. 7-11, Bal Harbour, Fla.
Progress in Head & Neck Oncology—1978—Nov. 9, Roswell Park continuing education in oncology.
French Society of Head and Neck Tumors—Nov. 10-11, Paris.
San Antonio Breast Cancer Symposium—Nov. 11, San Antonio, Texas.
NCI-CROS Conference on Combined Modality—Chemotherapy/Radiotherapy—Nov. 15-18, Hilton Head Island, South Carolina.
Clinical Cancer Program Project Committee Cancer Centers Support Subcommittee—Nov. 16, Linden Hill Hotel, Bethesda, Terrace Room, open 8:30—10 a.m.
Div. of Cancer Control & Rehabilitation Advisory Committee—Nov. 16-17, NIH Bldg 31 Room 10, 9 a.m. both days, open.
Cancer & Medicine 1978—Nov. 16-18, Univ. of Kentucky continuing education, Lexington.
Prostatic Cancer Working Group—Nov. 17, Bethesda Holiday Inn, open 8—9 a.m.
Current Trends in Analgesia for Cancer Patients—Nov. 18, Roswell Park continuing education in oncology.
National Cancer Advisory Board—Nov. 20-22, NIH Bldg 31 Room 6.
Symposium on Nutrition & Cancer—Nov. 20-22, Adelaide, Australia.
Annual Scientific Meeting of the Clinical Oncological Society of Australia—Nov. 22-24, Adelaide.
Clearinghouse Plenary Session—Nov. 30, NIH Bldg 31 Room 10, 9 a.m., open.
4th Congress of Medical Oncology Society—Dec. 2-4, Nice.
Pacific Endocurietherapy Society—Dec. 15-17, Wailea Beach Hotel, Maui, Hawaii.

NCI CONTRACT AWARDS

Title: Cervical Cancer Screening Program, modification
Contractor: Arizona State Dept. of Health, $136,309.

Title: Use of physico-chemical parameters in obtaining structure activity relationships with potentially cancer related endpoints
Contractors: Case Western Reserve Univ., $363,875; Johns Hopkins Univ., $104,599; Pennsylvania State Univ., $185,185, and Stanford Univ., $435,019.

Title: Study of viral transformation and chromosomal aberrations in human tumors
Contractor: Jewish Hospital & Medical Center, Brooklyn, $150,000.

The Cancer Letter —*Editor* JERRY D. BOYD

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