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CENTER CORE SUPPORT TO BE TRIMMED BY DROPPING FUNDS FOR SCIENTIST SALARIES, SHARED RESOURCES

The National Cancer Advisory Board has approved "in principal" an NCI staff proposal to modify cancer center core support, shifting a major portion—from 30 to 50%—of core grant funds into traditional (RO1) and program project (PO1) grants.

The modification, to be accomplished over a three to five year period, would phase out the funding of staff investigators' salaries, requiring that those salaries be funded on a competitive basis through traditional grants; and would stop funding most shared resources except during developmental stages.

The proposal would make more money available for developmental

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In Brief

NCI'S FIRST "ZERO BASED" BUDGET REQUEST ASKS FOR $1.036 BILLION; GRANTS GET EXTRA $1 MILLION

NCI HAS SENT its first "zero-based" budget request to the White House. It included 129 "decision packages" which add up to a request for $1.036 billion for the fiscal year starting Oct. 1, 1978 (FY 1979). The Office of Management & Budget will hold hearings this fall on the NCI (and the rest of the government) budget. Final asnwer on how convincing NCI has been under President Carter's "ZBB" procedure, in which every agency has to justify every request for money, will come when the President's budget goes to Congress next January. . . . **NCI DIRECTOR** Arthur Upton has decided to take the $1 million in his "director's reserve" fund and use it to pay traditional research grants RO1s) that were excluded from funding in the tight FY 1977 budget. Only the highest 30% were going to be funded, leaving a lot of good research and top scientists without NCI support. . . . **UPTON HAD** a conference with HEW Secretary Joseph Califano, primarily to brief him on the General Accounting Office review of NCI contracts. It was a "perfunctory" briefing, Upton said. Califano asked him to come back for two more discussions—one on NCI's overall program, and the other on prevention. . . . **R.S.K. YOUNG**, FDA group leader for oncology, says now that "conceptually, I go along with the plan for distribution of Group B drugs (through cancer centers—see *The Cancer Letter*, Aug. 26, Sept. 9) but there's still a fundamental problem that's unresolved for the Group C drugs." Those are proven anticancer drugs, not available anywhere else, which NCI sends directly to physicians on a humanitarian basis. Young wants NCI to require physicians to file more reports than NCI feels is necessary. Young said there is still no formal agreement between the two agencies on drug distribution. "The way I know if something is approved is when I see something in writing with a signature on it." NCI feels that FDA executives (Young excepted) have agreed to at least the major aspects of their plan.

CORE GRANTS TO INCREASE DEVELOPMENTAL FUNDS; RO1s, PO1s TO GET EXTRA MONEY

(Continued from page 1)

funding through core grants, including seed money for new investigators, new ideas, or investigators needing temporary support between grants; and money for other center developmental needs.

As a final part of the proposal, NCI asked that the core support grant period of performance be extended from three to five years, to ease the strain on center personnel and NCI staff and reviewers.

Thomas King, director of the Div. of Cancer Research Resources & Centers, told the Board's Subcommittee on Centers meeting prior to this week's Board sessions that the number and size of core grant applications have been increasing "at a tremendous rate" at a time when NCI's budget has levelled off. The growing disparity between projected budget levels has generated expectations of center directors far in excess of what NCI will be able to support, King said.

In fiscal 1978, core grant applications asked for $93.5 million. Reviewers recommended $63.3 million. But NCI will be able to pay only $59 million.

"Core grants are increasing in magnitude and scientific scope and are therefore becoming increasingly difficult to review and manage," a summary of the problem prepared by NCI staff said. "Budget limitations are likely to continue in the foreseeable future. Increasing demands are being placed on the centers and treatment program—the need for strengthening existing centers, the need for new centers, and the need for the centers to serve as a resource for other NCI divisions."

In preparing the proposal, NCI staff analyzed 32 of the 64 center core grants presently in existence. The analysis showed that shared resources and services required 43.3% of the budget; professional personnel, 29.7%; developmental funds, 9.8%; administration, 8%; and planning and evaluation, .5%.

The proposal makes no attempt to estimate how much money or what percentage would be shifted to increase developmental funds. All of the amount saved by shifting cost of staff investigators' salaries and shared resources would either go into RO1s and PO1s or would be used to beef up developmental funding. The amount going into developmental support would depend on the number and quality of applications.

Support for shared resources would be allowable through core grants for development of those resources, including equipment purchase, but not for maintenance. A charge back system would be utilized for maintenance, requiring payment by those using the resources from their contracts, grants, or other source of support.

"As the Cancer Centers Program evolves and matures, the funding mechanisms utilized for its support should be modified in order to respond to changing needs," the summary said. "Funding mechanisms should be altered so as to more fully ensure viable, long term stability, consistent with quality, for individual cancer centers including the capability to strengthen areas of weakness in the center.

"Consideration should be given to the fact that a cancer center generally passes through several different phases of development—planning, start up, maintenance, growth—and funding mechanisms are needed for each of these phases."

One comment in the summary, which clearly states what is likely to be one of the most controversial objectives of the proposal, says, "Research costs should be shifted from the core grant to individual research projects where the research can be better peer reviewed."

The practice of paying staff investigators' salaries from core grants was developed for the purpose, at least in the minds of some, to permit center directors some flexibility during the early growing stages of their centers. But it has been the intention of most members of the NCAB and of the President's Cancer Panel, stated on numerous occasions, that scientists at centers will have to compete for NCI support on even terms with all others through the traditional grant, cancer research emphasis grant, research contract and program project mechanisms.

The proposal was welcomed by those who have felt that some centers were getting away with the support of scientists and projects which might not be able to stand up to peer review through the other mechanisms.

The Subcommittee on Centers approved the staff proposal, modifying it on NCAB Chairman Jonathan Rhoads' suggestion to make the funding of shared resources more flexible. Rhoads asked that center directors be permitted to pay up to 30% of the cost of shared resources for a maximum of three years.

The subcommittee approved the proposal as suggested by Rhoads in a 5-1 vote, with subcommittee chairman William Shingleton, Henry Pitot, Gilbert Omenn, Frederick Seitz and Rhoads in favor. Denman Hammond, who argued against some phases of the plan, did not vote, and Thomas Newcomb, ex-officio member of the Board from the Veterans Administration, voted against it.

Hammond argued that, while "the recommendations in general are wise, they should be adopted only after careful consideration and consultation with center directors. The shared resources proposal could result in a disaster in some cases."

"If we don't stabilize this program, all our efforts —NCI's, and the centers—will be for nought," King said.

"I agree on the need to provide stability," Newcomb answered. "One way you don't provide for stability is to keep changing the rules. The way to strengthen a center is to leave the money is the hands

of center directors instead of giving it to strengthen people who are already strong, in areas where centers are weak."

When the matter came before the full Board, Newcomb cast the only vote against it, saying he did so "on principle."

Pitot told the subcommittee, "One of the vulnerable points in core grants is that developmental funds can't be properly peer reviewed, in the opinion of some. You can't just give a center director a blank check. We have to develop a system for scientific review."

Rhoads had some reservations about the staff projections of NCI budgets for the next five years. "I'm very reluctant to accept them," he said. With the growth in the gross national product that will occur by 1982, "there should be room for increased health expenditures. Those representing the National Cancer Program must take a more aggressive posture, and persuade the American people the Cancer Program is in their best interest. . . . This proposal won't save any money overall, but will merely reclassify expenditures. Nevertheless, it is important to make this reclassification. The scientific community looks upon RO1s and PO1s as the major effort to support scientists in cancer work."

Rhoads insisted that developmental funds be considered in two categories—general center development in initial stages, and "seed money" for new ideas and/or new investigators.

Omenn, an ex-officio Board member representing the White House Office of Science & Technology Policy, said, "Use of developmental funds is the critical issue. Is it seed money for new scientists, new ideas, or slush funds for center directors? We need some kind of analysis.

"Although centers have been established, none has ever been disestablished," Omenn continued. "Some centers were established during the growth of the Cancer Program which may not have been approved if today's standards were applied. . . . We have to make some hard decisions, above just transferring some money out of the centers program into traditional grants.

"The Centers Program has a good track record," Hammond answered. "NCI can be proud of it. . . . I object to national meetings entitled 'Problems of Cancer Centers.' We should have a meeting called 'Opportunities and Challenges of Centers.' "

David Joftes, chief of DCRRC's Review and Referral Branch, argued that center directors' discretionary money cannot be considered "slush funds," and must justify how they are being used when each grant is reviewed.

The full board was reluctant to accept the subcommittee's recommendation in full. The final proposal was only that the Board accepted it "in principle," after further changes in the shared resources support plan. Final action was delayed until the Board's November meeting, to permit center directors—who meet in Memphis early that month—an opportunity to study it and offer their comments.

Rhoads suggested an amendment to the subcommittee proposal that would provide for phasing out of shared resources support by core grants as those grants come in for renewal, with at least 70% of the cost to be transferred to other grants, contracts or other sources. "We can negotiate the hardship cases, like we always have," King said.

The proposal approved by the Board noted that there was no controversy over the proposals relating to developmental funds and to increase the core grant period from three to five years.

The staff suggested the following implementation schedule:

Jan. 1, 1978—Issue guidelines for modified cancer center support grants.

June 1, 1978—Last acceptance of core grant applications under the current guidelines.

Oct. 1, 1978—First deadline for applications for the modified grants under the new guidelines.

Sept. 30, 1982—All core grants awarded under the current guidelines replaced with modified grants.

Shingleton told the Board that the changes were intended to be done without disruption of present operations and will honor all current commitments. "But the impact could be quite disruptive on emerging centers, and their relationships with their own institutions," Shingleton said. "This proposal comes when we are in the middle of the Board review of comprehensive cancer centers (which will be completed by next February)." He said he felt it was not appropriate to issue new guidelines without full discussion with center directors.

Paul Marks, member of the President's Cancer Panel, said, "I enthusiastically support this effort. But shared resources goes to the heart of a center, and its centerness. If a center is operated efficiently, shared resources reduces the cost of those resources. This is what a center is all about, presumably. . . . The concept of a pay back is valid as far as is feasible."

Board member Harold Amos said that "centers were created with the intent of having an integrated function. Shared resources are part of research." He suggested that resources support be accomplished through program projects, which would permit the stringent review for scientific components.

But Marks said, "That's not a satisfactory process. It's tough, to have to draw a compromise on what we fund for centerness, and relate it to the peer review process for the components of a center. You could have a private buccaneer come in with a program project that would distort the center."

Hammond offered an amendment to the motion, making it read, "After a developmental period not to exceed three years, the cost of shared resources should be borne by investigators to the fullest extent

feasible and possible."

"What is meant by feasible?" asked Panel Chairman Benno Schmidt. "To the extent it can get by peer review?"

Hammond's motion died when there was no second. Rhoads' motion then was approved, with Newcomb's the only vote against it.

Hammond told the Board he agreed that phasing out staff investigators "should be done to some extent," but not until an evaluation can be made of the impact on centers. "On shared resources, I tend to agree with Dr. Marks. Core supported resources vary widely from one center to another. . . . I'm distressed that the solution to budgetary problems is to eliminate two major components of the Centers Program. They are there because there was a need. What does it take to develop a comprehensive cancer center? The ability to recruit staff, offer resources.

"It would be a mistake to rush into this type of change without careful consultation with center directors. NCI is in the process of developing a data base on centers (through Cancer Center Profiles DCRRC staff is collecting from each center)."

Board member Frank Dixon suggested that support of staff scientists could be transferred "right away" to the traditional grants. When Amos said that three years was too short and asked that it be set at five years, to coincide with the new time limit agreed upon, Dixon said, "Oh, come on. Anyone can put in for supplemental in two years."

Bernard Keele, assistant director of the Centers Program, said, "I'm not too sure how you would assess an allowable percentage of shared resources. I don't know how you would go about implementing that."

I have great confidence in your arithmetic ability," Rhoads answered. "You can use a computer if you need to."

"It improves your efficiency enormously if you have to pay for something out of your own grant," said Board member Bruce Ames.

MISSOURI, MICHIGAN CANCER PROGRAMS SEEK REVIEW FOR COMPREHENSIVE STATUS

The Missouri Cancer Program Inc. and the Comprehensive Cancer Center for Metropolitan Detroit have asked NCI and the National Cancer Advisory Board to conduct site visits of their operations with intent to seek recognition as comprehensive centers.

(The Detroit organization, despite its name, is not yet recognized by NCI as a comprehensive cancer center.)

John Yarbro, former director of NCI's Cancer Centers Program, is director of the Missouri group. Michael Brennan, director of the Michigan Cancer Foundation, heads the Detroit group.

The Board agreed to make the review, but not until April, 1978, after the review of existing comprehensive centers has been completed.

PANEL REACHES "CONSENSUS" ON MOST BCDDP-MAMMOGRAPHY QUESTIONS, ISSUES

Panelists at the NIH/NCI Consensus Development Meeting on Breast Cancer Screening supported continuation of the Breast Cancer Detection Demonstration Project, generally agreeing with the recommendations of the Beahrs Working Group (***The Cancer Letter***, Sept. 16). But, after three days of listening to the issues involved in use of mammography for breast cancer screening, and to each other's comments on the issues, the panelists came up with some conclusions of their own. They also agreed that on some of the issues, no consensus is presently possible.

Here are the questions put to the panel, and the panel's response:

Question 1: Is there evidence that early detection of breast cancer reduces mortality from breast cancer? Which of the available screening modalities or combination of modalities is most effective in early detection?

Answer: The available evidence on the value of screening for breast cancer derives from the HIP data. Based on this evidence we recommend that routine screening with physical examination in combination with mammography in the BCDDP program continue for women over the age of 50. There is no basis to screen routinely under age 50. The available evidence indicates that physical examination and mammography, in combination, can reduce breast cancer mortality in the over-50 age group.

It is now possible to detect earlier and smaller lesions, and many small lesions are detectable by mammography. Moreover, radiation dosage has been significantly decreased in recent years. However, there are no data to indicate that these advances have improved mortality in women under age 50.

Question 2: What are the risks of each of the available screening modalities for early detection of breast cancer?

Answer: There are no known risks due to physical examination or other such potential modalities as thermography or ultrasound.

Mammography is the only screening method that has been indicted for inducing risk. The precise risk has not been determined. Current theory holds that risk increases with increasing dose.

Question 3: Do the potential risks vs. benefits differ for different modalities of breast cancer detection and at different ages of patients screened?

Answer: Mammography is the only modality in question in terms of risk. Several studies indicate that radiation risk may decrease with age, but there is no definite evidence.

Question 4: If it is not possible to answer any or all of the questions 1, 2 or 3, what data need to be generated to provide adequate answers?

Answer: New diagnostic/screening techniques are needed. We recommend emphasizing research in such noninvasive techniques as thermography, ultrasound,

and hormonal markers.

The panel could not reach consensus on what kinds of further studies are needed. It deplored the lack of clear-cut data on the risk-benefit ratio of screening for women under 50.

Question 5: What are the practical and ethical considerations for implementing demonstration projects in cancer detection and how does the BCDDP comply with these considerations?

Answer: Demonstration programs by definition utilize proven and practical methods.

The BCDDP project has from its inception inevitably include some research elements. As an experimental program, the BCDDP must consider important ethical concerns. We recommend that the BCDDP use an informed consent form that indicates radiation dosage used at each institution; and that all information gained through the program will be disclosed to the screenee and her physician.

The panel recommended that screenees be notified of changes in diagnosis following pathologic review. It also recommended that BCDDP develop a concurrent pathology review. It recommended that any lesions smaller than one centimeter, or any papillary intraductal proliferations diagnosed as malignant be reviewed by two consultant pathologists prior to definitive surgery.

Any new experimental studies should consider its justification from a cost-benefit point of view, informed consent, mode of selection of participants, and compensation for unknown risks. More women, both professional and consumer, should be included in such programs.

Question 6: What can the consensus panel recommend as to the type and frequency of breast cancer screening and who should provide this screening?

Answer: The consensus panel recommends that screening with physical examination in combination with mammography, be available on request for women over 50.

The panel concurs with the Beahrs group recommendations that continued mammography screening for women 40 through 49 in the BCDDP be restricted to women having a personal history of breast cancer, or whose mothers or sisters have a history of breast cancer. Mammography screening for women between 35 and 39 should be limited to those women having a personal history of breast cancer. All mammography screening should be in combination with physical examination.

Limits should be set on radiation dosage for mammography.

Women under 50 already participating in the BCDDP should be encouraged to continue. Those not qualifying for mammograms should continue with an annual physical examination accompanied by continued emphasis on self examination.

Throughout the panel considerations, the distinction was emphasized between mammography used for diagnosis of symptoms—the value of which is not in question—and mammographic screening to detect possible disease in women who have no symptoms whatsoever.

The panel understood that no new participants are being added to the program. Although women under 50 will no longer be screened routintly with mammograms, ethical considerations led the panel to decide that women under 50 who are already participating in the BCDDP program may elect to continue receiving annual mammograms if they wish—so long as they understand and are informed that there is no proven benefit and there is presumed risk, and that the panel does not recommend further mammography.

The BCDDP will continue to follow all women in whom breast cancer has been diagnosed. However, the panel was unable to reach a consensus regarding the need to follow all women who have had mammograms in the BCDDP.

Nor did the panel reach a consensus about the value of randomized clinical trials.

The recommendation that younger women be permitted to continue receiving mammograms if they wish, provided they are fully informed of the presumed risk and that there is no proven benefit, departs not only from the Beahrs recommendations but also from the guidelines issued by NCI last May. Those guidelines strictly limited the use of mammography for women under 50 to the two major high risk groups—personal and familial history of breast cancer.

NCI Director Arthur Upton said he was "enormously pleased with the recommendations. The discussions have been candid and informative. The panel's recommendations conform reasonably close to those of the Beahrs group. There were no drastic changes recommended for the BCDDP. The suggested modifications are reasonable. As to the extent and speed with which they will be put into practice, I can't tell at this time."

One development which caught the eye of panel members, other participants and the press was the discovery by the Beahrs group of 66 cases originally diagnosed as minimal cancer (lesions less than one centimeter) which the Beahrs review determined were benign. Another 22 were questionable. The women had, following original diagnosis, undergone treatment, most of them receiving complete mastectomies.

Beahrs said that demonstrated that pathology "is an interpretive science" and that he felt the number of errors was not excessive. The panel's recommendation relating to procedures to be followed after a minimal cancer has been diagnosed in effect would establish the two stage clinical procedure for such cancers. Panelists agreed that the fact that this would give patients the opportunity to participate in treatment decisions would be an added benefit.

Some panel members and others felt this recommendation would reach further than the BCDDP, impacting on general clinical practice and encouraging the two-stage procedure in the management of all breast cancer cases, or at least in all diagnosed as minimal.

Benjamin Byrd, chairman of the American Cancer Society Task Force on Breast Cancer (ACS co-sponsors the BCDDP with NCI), defended the program:

"Mammography has proven to be capable of finding invasive breast cancers too small to be felt even by an experienced physician and it can find in-situ (non-invasive) cancers which are so early that cure can be assured in almost all instances," Byrd said.

"When a valuable cancer diagnostic tool is developed, the American Cancer Society recognizes its responsibility to inform the medical profession and the public. . . . Mammography—breast x-ray—is the first significant modern advance in detecting early breast cancer.

"In 1975 some epidemiologists juxtaposed lack of evidence of benefit from mammography in women under 50 in the old HIP study with recent estimates of the presumptive risks of x-ray. Extrapolating from very large doses of radiation, they concluded that even one rad of x-ray might slightly increase the risk of breast cancer developing many years later. The extrapolations were based on radiation exposures resulting from the Hiroshima and Nagasaki bomb blast and from instances of the use of therapeutic radiation. The doses were much higher than the exposure resulting from screening and diagnostic x-rays and certainly far higher than the average exposure at the ACS-NCI Breast Cancer Detection Demonstration projects," Byrd said.

John Bailar, epidemiologist and editor of the *Journal of the National Cancer Institute,* was the first to raise the question of radiation hazards in the BCDDP. Bailar had voiced his objections when the project was being proposed, when he was head of the new Cancer Control Program. He continued to object after the program was under way, and his objections finally led to the studies which resulted in reducing the extent of use of mammography in the BCDDP.

Bailar stood by his guns in his presentation to the panel. Bailar argued:

"We must start with the understanding that screening is done to find women who have a cancer waiting to be found, presently unknown, but detectable. The role of mammography should be to detect non-palpable cancers, not to confirm the presence of cancers detectable by regular, careful, competent physical examination or in other ways. More specifically, x-ray mammography for the detection of breast cancer is of very limited value unless a breast cancer is present, is presently asymptomatic and undiscovered, and is undetectable by other means that are easy, fast, reliable, inexpensive and entirely safe. Thus we must look at various personal characteristics that are known to be related to the incidence of breast cancer. In the present context the most important of these are age, personal history of breast cancer, or a close family history of breast cancer (mother or sister). Many other risk factors are known, but they are less important with regard to decisions on screening programs. They include age at menarche, number of children, age at first or last child, hormonal status, general area of residence, religion, social class and many others.

"Much is known about the individual effects of each of these factors, but we known far less about their combined effects. We do know that a woman can have one or even several of these risk factors and still have a personal risk of breast cancer that is well below average. Much more research is needed to determine whether the effects of risk factors are independent, synergistic, antagonistic, or some combination of these. However, statements that 80% of women are at high risk are mathematically absurd: We simply cannot have everyone, or even a majority, at risks significantly above average.

". . . All available evidence indicates that radiation carcinogenesis in the breast is a linear, nonthreshold process, and the risk for women over 35 is approximately 5.5-6 extra cases per million person-year-rads beginning 10 years after exposure. I am tired of hearing that this risk is 'theoretical.' All of the evidence—all of it—confirms that radiation entails a risk, and the burden of proof is now on those who claim the opposite—that radiation is safe. We know that the human organ most sensitive to radiation carcinogenesis is the female breast. It is even more sensitive than bone marrow, lung, or thyroid gland. Doses of 1 rad are of serious concern, especially when delivered repeatedly to great numbers of women. Admittedly, the risks per woman are small, but whereas these risks may be proved justified, they must not be ignored or concealed. We probably should also consider the unconfirmed possibility that radiation acts synergistically with the 'natural' determinants of breast cancer. This phenomenon does seem to occur in some biologic systems used to test other carcinogenic agents. If it occurs with human breast cancer—and we don't know—high risk women are the ones we should most avoid in x-ray screening programs," Bailar said.

Samuel Thier, chairman of the Dept. of Internal Medicine at Yale, was chairman of the panel. Other members were Kenneth Casebeer, Miami Univ. Law School; Archie Cochrane, British epidemiologist; Willie Dell, Richmond, Va., Councilwoman; Milton Elkin, Albert Einstein College of Medicine; Margaret Farley, Yale School of Religious Studies; Emil Frei, Sidney Farber Cancer Institute; Raffaele Lattes, Columbia Univ.; Virgil Loeb, Washington Univ. School of Medicine; Brian MacMahon, Harvard School of Public Health; George Mishtowt, Maryland

physician; Francis Moore, Harvard Medical School; Edward Radford, Univ. of Pittsburgh; Leo Rigler, UCLA; Jane Wright, New York Medical College, and Patricia Hall, American National Red Cross.

NCI TO RECOMPETE CIDAC CONTRACTS; CANCERGRAM PRODUCTION HALF CAPACITY

NCI will recompete the three contracts for operating the Cancer Information Dissemination and Analysis Centers (CIDACs). The contracts now are held by Stanford Research Institute, for the CIDAC which reviews the literature and produces abstracts on chemical, environmental and radiation carcinogenesis; M.D. Anderson, for the CIDAC on diagnosis and therapy; and Franklin Institute, for the CIDAC on virology, immunology and basic cancer biology.

The three will complete the two year periods for which the contracts were awarded during the first half of 1978. NCI is generally satisfied with the work of the three contractors, particularly MDA's handling of the clinical CIDAC. But since there was no real justification for noncompetitive renewal of the contracts, NCI felt compelled to recompete them.

SRI will receive $462,379 for the two years; MDA $433,210; and Franklin $450,646. SRI's contract expires in March, 1978, and the other two the following June.

Cancergrams compiled from the abstracts collected by each CIDAC are produced for NCI by the National Technical Information Service, an agency of the Dept. of Commerce. They are sent free to all principal investigators with ongoing research projects in the respective fields. Anyone else may purchase them for $24 per year for each of the three from NTIS, Subscription Section, 5285 Port Royal Rd., Springfield, Va. 22161.

MDA's monthly clinical Cancergram now contains 12 titles. SRI's carcinogenesis Cancergram has nine titles, and Franklin's Cancergram has five in virology, four in immunology and five in biology. Each Cancergram includes from 20 to 50 abstracts. The abstracts are from current literature, published less than two months prior to appearance in the Cancergrams.

NCI feels that the CIDACs are about half way to capacity, and that by the end of next year they should be turning out about twice as many titles as they are now.

The CIDACs provide the scientific expertise required to review, evaluate and analyze abstracts and to handle the other tasks involved (See the RFP announcement following). The only hardware quired is a computer terminal to transmit material to the data base operated by IITRI in Chicago. IITRI is working on a three-year contract with NCI, a contract that will be recompeted upon expiration.

RFPs AVAILABLE

Requests for proposal described here pertain to contracts planned for award by the National Cancer Institute, unless otherwise noted. Write to the Contracting Officer or Contract Specialist for copies of the RFP, citing the RFP number. Some listings will show the phone number of the Contract Specialist, who will respond to questions. Listings identify the respective sections of the Research Contracts Branch which are issuing the RFPs. Their addresses, all followed by NIH, Bethesda, Md. 20014, are:
Biology & Diagnosis Section — Landow Building
Viral Oncology & Field Studies Section — Landow Building
Control & Rehabilitation — Blair Building
Carcinogenesis Section — Blair Building
Treatment Section — Blair Building
Office of the Director Section — Blair Building
Deadline date shown for each listing is the final day for receipt of the completed proposal unless otherwise indicated.

RFP NOI-CO-75403-04

Title: *Cancer Information Dissemination and Analysis Centers (CIDACs)*
Deadline: *Approximately mid-November*

NCI is requesting proposals for the establishment of three Cancer Information Dissemination and Analysis Centers (CIDACs) for the International Cancer Research Data Bank (ICRDB) Program. One contract will be awarded for each CIDAC subject area listed below:

A. *Chemical, Environmental and Radiation Carcinogenesis,* including studies of chemical and physical carcinogenic agents and their mechanism of action related radiation biology; endocrine-related carcinogenesis; role of environmental, occupational, nutritional, genetic and behavioral factors in cancer etiology; epidemiology of human cancer; carcinogenesis and precancerous conditions of specific organ systems; agents and factors that modify carcinogenesis; and theoretical aspects of carcinogenesis.

B. *Cancer Diagnosis and Therapy,* including clinical and related preclinical studies of agents and modalities used for cancer therapy of all organ sites; methods for detection, diagnosis, staging, and determining the prognosis of cancer of all organ sites; cancer patient care and rehabilitation; and related cancer control activities.

C. *Cancer Virology, Immunology and Basic Cancer Biology,* including role of viruses in cancer etiology; all cancer-related aspects of immunology (excluding immunotherapy); cancer biochemistry; basic aspects of cell division and growth regulation; host-tumor interactions; and the isolation, synthesis, pharmacology, metabolism, and mechanism of action of anticancer and antiviral agents.

The major activities of a CIDAC are briefly summarized:

1. Providing scientific input needed for production of "Cancergrams," current awareness bulletins containing abstracts of recently published cancer research.

2. Producing "Oncology Overviews," retrospective compilations of selected abstracts on high interest cancer research topics.

3. Responding rapidly to requests for information on cancer research in specific subject areas.

4. Identifying significant new scientific findings

in monthly reports to the ICRDB Program.

5. Identifying and implementing innovative projects to promote communication and exchange of technical information between cancer researchers.

A bidders' conference will be scheduled for the above projects. Notice concerning the conference will be mailed with the RFP, which will be available on or before Sept. 30, 1977.

Contracting Officer: Patricia Ann Eigler
Office of Director
301-427-7984

RFP NCI-CM-87178-26

Title: *Statistical support for cooperative groups engaged in intensive studies and investigations on cancer patients*

Deadline: *Nov. 15*

Statistical support and analysis for three cooperative groups encompassing 255 institutions, accruing collectively approximately 6500 cancer patients annually. Interested sources should have available to direct and perform the work, senior biostatisticians and trained computer personnel who are experienced in: (a) sophisticated study designs for multidisciplinary therapeutic treatment programs on cancer patients; (b) setting up effective multifaceted computerized programs for clinical data retrieval and interim and final evaluation of such data; and (c) dealing effectively with physicians participating in group research studies. Government furnished equipment will be made available for use under this contract project, including a Digital Equipment Corp. DECSYSTEM-20 computer and accessories.

Contract Specialist: C. Swift
Cancer Treatment
301-427-8125

CONTRACT AWARDS

Title: Study cellular differentiation and viral oncogenesis
Contractor: Salk Institute, $439,317.

Title: Support for Cancer Field Studies, continuation
Contractor: Westat Inc., $2,353,891.

Title: In vitro study of the interrelationship between RadLV infection and lymphocyte differentiation in C57B1/Ka mice
Contractor: Stanford Univ., $398,000.

Title: Studies on the role of hormonal factors on induction of mammary tumors in MPMV infected animals, continuation
Contractor: Mason Research Institute, $37,839.

Title: Cancer mortality studies, continuation
Contractor: Univ. of Minnesota, $65,729.

Title: Stimulation of immunity to virus associated and tumor associated antigens in mouse systems, continuation
Contractor: Mt. Sinai School of Medicine, $49,100.

Title: Epidemiologic studies of cancer in Louisiana, continuation
Contractor: Tulane Univ., $99,929.

Title: Japan-Hawaii cancer study, continuation
Contractor: Kuakini Medical Center, Honolulu, $370,835.

Title: Conduct EPA/NCI special skin cancer epidemiology study
Contractors: California State Dept. of Health, $85,720; and Tulane Univ., $91,201.

Title: Case control study of carcinoma of the endometrium
Contractor: Boston Univ., $111,026.

Title: Study interrelationship between MuLV infection and myeloid cell differentation
Contractor: Memorial Sloan-Kettering, $462,000.

SOLE SOURCE NEGOTIATIONS

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

Title: Training programs for maxillofacial prosthodontists and maxillofacial dental technicians, renewal
Contractor: Eye and Ear Hospital of Pittsburgh.

Title: Support of activities of the U.S.A. National Committee for the International Union Against Cancer (UICC), modification
Contractor: National Academy of Sciences.

Title: Coordination of mammography education programs, renewal
Contractor: American College of Radiology.

Title: Investigation of estrogen binding and estrophile proteins in human breast cancer, continuation
Contractor: Worcester Foundation for Experimental Biology.

Title: Studies in a predictive transplantable animal mammary tumor model, continuation
Contractor: Mason Research Institute.

Title: Smoking and Health prime contract, continuation
Contractor: Enviro Control Inc.

—*Editor* JERRY D. BOYD

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