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NCAB SUBCOMMITTEE APPROVES CONCEPT OF QUALIFYING MINIMUMS, SALARY SUPPORT LIMIT FOR CORE GRANTS

The National Cancer Advisory Board Subcommittee on Centers & Construction last week approved the concepts of qualifying minimums for cancer center core grants and of limiting support of staff investi-

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In Brief

WHAT'S IN A NAME? DRCCA DOESN'T DO IT; O'CONOR SAYS ICRDB PROGRAM SHOULD CONSIDER NEW CHALLENGES

NCI EXECUTIVES aren't happy with the name of their new division, the "Div. of Resources, Centers & Community Activities." Division Acting Director William Terry asked members of his Board of Scientific Counselors to suggest other names. The division houses cancer control, centers, applied prevention, education, construction, and organ site programs. . . . **GREGORY O'CONOR**, back at his old job running NCI's Office of International Affairs, would like to set up a conference next year on the entire field of international scientific communication. Now that the International Cancer Research Data Bank, located in O'Conor's office, has been fully implemented and is recognized as a valuable resource, it is time to discuss future needs and new technology, he said. O'Conor's three years as director of the Div. of Cancer Cause & Prevention "was a rewarding experience," he said. "I hope what we did during that time was in the best interests of the National Cancer Program and helped to point the division in the right direction." . . . **ERNST WYNDER**, member of DRCCA's Board of Scientific Counselors, to Terry: "You have a great opportunity. By inheriting everything, you don't have to take responsibility for anything." . . . **LEONARD DEROGATIS**, also a member of the DRCCA Board: "It is important to have appropriate participation on study sections. For competent investigators to be willing to submit grant applications, they must have confidence they will have competent review." . . . **HARRY EAGLE**, another DRCCA Board member, on the seemingly endless consideration of center grant guidelines: "If we don't reach some consensus, this statement by Cromwell might apply to us—'Be gone; you've been here too long for the good you do'.". . . **JOHN PETTIT**, vice president of finance for the Michigan Cancer Foundation, has been appointed chief administrative officer of the Sidney Farber Cancer Institute. . . . **"BRAIN TUMORS** in the Chemical Industry" is the topic of a workshop Oct. 27-29 sponsored by the New York Academy of Sciences. It will be held at the Barbizon Plaza Hotel. Irving Selikoff and Cuyler Hammond, Mount Sinai School of Medicine, are chairmen. Contact Conference Director, New York Academy of Sciences, 2 East 63rd St., New York 10021, phone 212-838-0230.

NCAB WILL SHARE GUIDELINE REVISION TASK WITH DRCCA'S NEW ADVISORY BOARD

(Continued from page 1)

gator salaries from those grants.

The subcommittee met with three center directors to discuss the latest version of proposed new guidelines for core grants. Center executives and the American Assn. of Cancer Institutes bitterly opposed previous drafts of NCI staff proposals.

The present version defers to some of the centers' objections, although some feel that it remains too inflexible to be applied fairly. The subcommittee heard new appeals for flexibility from the three center directors present—John Durant, Univ. of Alabama; Albert Owens, Johns Hopkins; and Timothy Talbot, Fox Chase—and then agreed it would recommend that the NCAB accept certain policies expressed in the new proposals.

The subcommittee also determined that much of the guideline proposals fell into the category of adminstrative matters and referred them to the Board of Scientific Counselors of the Div. of Resources, Centers & Community Activities. Charles Moertel, a member of that Board, heads a subcommittee charged with studying the guidelines issue. Moertel's subcommittee will report at the Board of Scientific Counselors' meeting in January. NCAB Subcommittee Chairman Maureen Henderson said she hoped the final proposals would be presented to the NCAB at its May, 1981 meeting.

Henderson's subcommittee agreed that these concepts should be included in the guidelines:

• Applications for cancer center core grants will be accepted only from those institutions which have an "adequate" base of established programs in laboratory and/or clinical cancer research. "The high quality of the programs should be evident from the fact that they have been awarded support through national peer reviewed competition, such as in the form of NCI grants and contracts," the proposed guidelines say.

An earlier edition of the guidelines changes limited that base to NCI grants and contracts. Arguments by AACI and others prevailed, and the present proposal broadens that to include awards from the American Cancer Society and research grant and research training support from other NIH institutes and the National Science Foundation. Only 25 percent of an institution's support from other institutes and NSF could be counted toward the base, and contracts from sources other than NCI could not be included. Support and resource contracts, such as virus and animal production, could not be counted.

The current proposal would establish a minimum of $750,000 in direct costs of such research support to qualify an institution for a core grant. However, the NCAB subcommittee did not agree on a specific figure and left that open for further consideration.

The first draft of the guideline changes called for a limit on the amount that could be requested for a core grant, with a maximum of 50 percent of research and training support. That was dropped in the current proposals, with the only limit being the $5 million established by Congress in the National Cancer Act.

• An institution would be eligible for only one core grant. In the case of a statewide university system or similar organization, "institution" is defined as a major unit of such a system rather than the system as a whole.

• The core grant provides funds for salaries of selected staff, for the operation of centralized shared resources and services and for the administration of the center. In addition, the core grant may provide salaries and research costs of young investigators at the parent institution who have not previously had funded grants and/or for investigators newly recruited from outside the parent institution. Funds for new investigators are limited in duration and amount. Support of all other cancer center functions must depend upon other federal and nonfederal funding mechanisms, such as regular research grant projects, program project grants, cancer control grants, training grants, education grants, research contracts, state funds, institutional funds, and private donations.

• There must be research activity in a variety of disciplines and there must be evidence of a high degree of interdisciplinary coordination, interaction and cooperation among center members. "Scientists or clinicians, each pursuing his or her research effort independently so that interdisciplinary interactions are limited or nonexistent, cannot be considered to be functioning collectively as a center. Such individuals are supported more suitably by other mechanisms such as individual project grants. A center's core support should facilitate creative interactive activities such that the whole is greater than the sum of its parts, and should increase efficiency by providing support for shared equipment and centralized multiuser facilities.

• The center must have appropriate and adequate organization and facilities for the conduct and evaluation of center activities. The facilities and organizational arrangements should facilitate collaboration among constituent programs.

• The center must have a qualified director with adequate authority. The center director must be serving on a full time or on a significant part time basis and should have the following authority:

[The subcommittee endorsed the concepts in the following section, some of which have drawn objections from AACI and center executives. The subcommittee agreed that these should not be inflexible regulations and that exceptions should be permitted.

A. Control of appointments or, at a minimum,

joint control with department chairmen of appointments within the center. These appointments should be administratively indistinguishable from department appointments.

B. Full control of center space and equipment, or control equivalent to that of a department chairman at that institution.

C. If the center has a clinical component, the center director or his designee must have control of grouped beds dedicated to research.

• Institutional commitment. "There must be an adequate commitment of the parent institution to the cancer center. The center should be recognized as a major element within the organizational structure. Parent institution commitment may be manifested by various combinations of personnel, facilities and financial obligations and commitments. It should be emphasized that the degree to which an applicant meets these criteria will be a major determining factor in the review and approval of applications for cancer center core support grants."

The issue of staff investigator salary support from the core grant is perhaps the most controversial of the guideline proposals.

Under the current guidelines, which went into effect in 1976, centers may request in their core grant applications salary support from core up to the full amount of the time they devote to center business and/or peer reviewed grants. Thus, many would qualify for 100 percent of their salaries from the core grant.

Until the last three to four years, few centers took advantage of that policy, and most staff investigators have received a majority of their salary support from their own grants or other sources. However, NCI staff has noted a trend of increasing requests for salary support. NCI fears that the trend could have devastating results on the centers budget if permitted to continue.

The problem is not so serious at the moment, but the potential is serious, Ray Morrison, program director for the Cancer Centers Program staff, told the subcommittee. "The amount approved in core is determined by the amount requested and not by peer review," Morrison said. Reviewers have no choice but to approve amounts requested if they meet the percentage of time requirements.

Morrison said that two centers which have not received any staff investigator salary support from core grants until now have requested such support in their renewal applications and it will total about $1 million. With a level budget for centers, that means that core awards to two centers would have to go unfunded.

Talbot, who said his institution is "totally free standing and totally dependent," looks to the core grant to provide stability. "Our entire institution was developed not alone by NCI money but because of it." Referring to the examples cited by Morrison, Talbot said, "I'm sure there are some unrealistic and even idiotic requests, but those two aren't typical. . . . I'm the most avid proponent of R01s. That's what makes us go, and our core grant supports people doing the R01s."

Morrison mentioned another example to show why some centers are moving salary support from R01s and program projects to core. The applicant, who had the right under current guidelines to request salary from the core grant, said he was doing so because he wanted his program project fund request to be reduced so that it would have a better chance of being approved.

DRCCA Acting Director William Terry agreed that there is a feeling among some grantees that they have an edge by not requesting salary support in those grants.

"That is a misapprehension," commented subcommittee member Janet Rowley. "Study sections approve salary requests. I'm 100 percent supported on four grants."

"Study sections I have served on thought a grant was not much good if some salary support was not requested," Henderson said.

Durant said, "We can live with reasonable guidelines as long as they are flexible. . . . When you try to solve a problem by creating a formula, the formula becomes the problem."

Subcommittee member Gale Katterhagen asked, "With a shrinking budget, do we have too many centers?"

Talbot replied that "the problem could be addressed by phasing out two centers a year for several years. You probably could do the program more good if you did that than anything else you could do."

Subcommittee member LaSalle Leffall, after Durant noted that his core grant had remained at about the same level for 10 years, commented, "You had little change in the core grant but continued to grow. Does that mean that you can still grow with the same amount?"

"If you ask me what I would like," Durant answered, "I would like a great deal more money. But if you ask me what I can live with, I want stability. We can grow a little with the same amount of core. Core represents 25 percent of the NCI funds we receive if you take out control and construction. Originally, core was 100 percent."

Responding to Henderson's question on what it would take to achieve stability, Durant said, "We've been reviewed every three years and it drives us bananas. We would like seven years."

Owens agreed. "Give us seven years on a core grant and visit us in five."

NCI staff developed a statement on centers pro-

gram policy on staff investigator salary:

"For a number of years, NCI has maintained a policy whereby our core grants to cancer centers could support the salaries of investigators at the centers. The purpose of such a policy is to provide one of the elements which can contribute to stability of the center and to administrative and programmatic control of center activities. . . .

"Individuals who qualify for such salary support are to be investigators who are in charge of independent research projects that have received, and this is the key phrase, creditable external peer review and approval. Questions are always raised as to what is 'creditable' peer review. The standard by which peer review is measured is the NIH study section system. Certainly if an investigator has received a grant through NIH study section review, that is deemed creditable review. The decision as to what else is creditable is to be made by site visitors and the parent committee, and should be based on whether or not an investigator's proposal has been independently judged by qualified peers.

"A question often asked is, does a staff investigator's grant have to be funded? The guidelines state that this category includes those who 'conduct or are in charge' of independent projects. . . . i.e., the project should be active or ongoing and, therefore, funded.

"Another question which always occurs is how much or how large a portion of the staff investigator's salary is allowable on the core grant? The basic principle as stated in the guidelines is that the percentage of any salary should directly reflect the percent of effort on his peer reviewed projects plus the effort on other center activities such as supervising a center facility. As an example, an investigator who spends 50 percent time on a project which is supported by an individual grant and who also spends 20 percent time supervising the electron microscopy facility of the center could receive 70 percent of his salary from the core grant, the 50 percent on his grant plus the 20 percent on the EM facility. If the 50 percent salary was paid by an NCI grant, that grant would be reduced accordingly.

"The staff investigator's project should be clearly relevant to the National Cancer Program. It should be emphasized that most areas of basic research are relevant to the National Cancer Program and criteria for making this judgment should be quite broad. The staff investigator should be a member of or closely identified with the center.

"Cancer center support (core) grant reviewers are not asked to evaluate the scientific merit of the research projects conducted by the staff investigators, the assumption being that if the projects have received creditable external peer review and approval they are scientifically meritorious. Reviewers should concentrate on questions such as: (1) Was the peer review creditable? (2) Is the project relevant to the National Cancer Program? (3) Is the staff investigator a member of or closely identified with the center? (4) Is the amount of salary requested reflective of the staff investigator's effort on his projects plus his additional effort for the center?"

The latest draft of guideline revisions would limit staff investigator salary support to a maximum of 35 percent of an individual's total salary. It could be less, depending on the percentage of effort approved and funded on individual grants and contracts.

The NCAB subcommittee agreed that some limit on such salary support is needed and will recommend to the full Board that the 35 percent cap be considered.

Two requirements in the first revision that were opposed by AACI and center executives were that to receive core salary support investigators had to be located in center space, and that no more than 25 percent of the total grant could be for professional personnel salaries. Both were eliminated in the latest draft.

The new draft also retains the limit of three full-time salaries for senior leadership personnel but drops the requirement that such salaries be awarded to four individuals.

DRCCA STILL BEING ORGANIZED, WILL GET NEW PROGRAM IN CHEMOPREVENTION TRIALS

NCI has been in a constant state of reorganization for nearly three years, and the process has not yet been completed. When HHS Secretary Patricia Harris added the final signature during the summer on the reorganization initiated by then NCI Director Arthur Upton in January, 1978, here's how the new Div. of Resources, Centers & Community Activities was established in that package:

The division was organized into three programs—Prevention, Detection & Diagnosis; Treatment, Continuing Care & Rehabilitation; and Research Resources. Three branches were listed under Prevention, Detection & Diagnosis—Preventive Medicine, Occupational Medicine, and Behavioral Medicine.

Branches in Treatment, Continuing Care & Rehabilitation were Community Outreach & Rehabilitation, Research Facilities, and Educational Research & Evaluation. Research Resources included the Organ Site, Clinical Manpower, Research Manpower, and Cancer Centers branches.

DRCCA staff and many of the division's constituents have not been happy with that arrangement. Division Acting Director William Terry and his staff have been tinkering with the table of organization and have come up with this lineup which they may submit through channels to Harris:

- Prevention Program—Branches will include Occupational Medicine, Behavioral Medicine, Preventive Medicine, Screening, and Chemoprevention. The first

three are existing branches, the last two proposed new ones.

• Centers & Community Oncology Program—Branches will include Community Outreach & Rehabilitation, Cancer Centers, Organ Sites, and Research Facilities (construction).

• Education Program—Branches will include Educational Research & Evaluation, Clinical Manpower, and Research Manpower.

The division's Board of Scientific Counselors was briefed on the proposed changes at its recent initial meeting and heard reports on activities of the various branches, most of which had been transferred more or less intact from the defunct Div. of Cancer Control & Rehabilitation and the defunct Div. of Research Resources & Centers.

The division's major new initiative will be chemoprevention clinical trials, which NCI Director Vincent DeVita said, "Scientifically, that is the area of greatest concern to me at the moment. It's time to get started on it."

DeVita said he first thought chemoprevention trials should be the responsibility of the Div. of Cancer Treatment, the division with the most experience with clinical trials and also the one with an established drug formulation program. But DeVita recognized there probably would be a duplication of some efforts in any case, and decided that application of chemoprevention should be in the division charged with applied prevention. Also, there is no valid reason why DCT cannot provide any drug formulation service that may be required or assist with setting up clinical trials.

Board member Anthony Miller agreed. "This division is appropriate for those trials. We've got to take a stand sometime and say we have something and will test it in man."

Vitamin C could be one of the first agents tested. "I wasn't excited about it for treatment," DeVita said, "but I find some threads related to prevention that interest me. I'm willing to test it (for prevention)."

Chemoprevention research will remain the province of the Div. of Cancer Cause & Prevention, DeVita said.

In the Board's discussion of the division's budget, DeVita pointed out the cancer control still appears as a line item in the appropriations bills. "The division may have a problem tracking funds (since it includes components not considered as cancer control). "Our commitment is still to community outreach. One of our serious problems is with community physicians, in the application of present technology so rigidly that it doesn't allow us to continue accruing patients on protocols. It's the most serious problem we face. If every cancer patient is treated with the treatment we have today, there would be no clinical research. I've talked with practicing physicians many times, including Dr. (Charles) Cobau (a member of the Board). No one has come up with a solution."

One suggestion that DeVita agreed could help would be to continue the division's support of certain Cooperative Groups under contract to work with community hospitals helping them participate in clinical studies. The program has been very successful but is due to phase out after five years, with no plans for continued funding. Some of the contracts are scheduled to end next year.

Board member Lester Breslow saw a deeper problem. "Even if the practicing community incorporates what NCI gets to it, it still doesn't get to the problem because of delivery system inadequacies. Perhaps the focus should be on specific tumors in defined populations."

"As one who thinks there doesn't need to be a problem in dealing with practicing physicians, the problems frequently are here (at NCI)," commented Board member Charles Moertel. "The CHOP (Community Hospital Oncology Program) program, which required that participating hospitals have no relationship with cancer centers, is inhibitory."

"You have a program that works," DeVita said, referring to the North Central Cancer Treatment Group which Mayo organized as a regional cooperative group of community physicians. CHOP was intended to help those communities without that type of community-center relationship, DeVita pointed out.

The Board considered the 1981 fiscal year budget. The appropriations bill which passed the House cut $5 million from the cancer control budget, directing that that amount be transferred to treatment research.

When Board Chairman Stephen Carter asked where the $5 million cut would be made, Terry said he did not know.

"Can the Board make suggestions on where the decrease would come from?" asked Board member Ernst Wynder. Terry said that it could.

"We have to study the options, possibly with a subcommittee working on that issue," Carter said. "I would hate to be dogmatic now about where to cut."

"We're obliged to fund ongoing grants," Terry said. "We could reduce new or competing renewal grants."

"It is good occasionally to have less money available so we have to make an agonizing reappraisal," Wynder said.

"In budgetary advances and retrenchment, certain fields are always slighted," Breslow said. "Where should we do more than we are doing now? We are agreed that we should do more in epidemiology and biostatistics, and in manpower training in those areas. A second area is prevention, and a third is control, except recently when Congress had hopes NCI would carry out a mandate. Over the decades, control has suffered programmatically, in good and lean years."

"I think we have to look at the opportunities for increased funding," Carter said. "We could make a cogent argument for increased funding for just about any area. But if we put more dollars into something, we have to take it away from something else. We have to look at the science, at what is going on, at the opportunities."

"It is important to recognize our limitations," Moertel said. "It will take more careful consideration on budgetary allocations."

"I've often wondered who judges how we do things," Wynder said. "In our kind of work, there are no Nielsen ratings. We are judged by our peers. How do you get the best priority scores? Select the reviewers yourself."

"Let's not tiptoe when we ought to lunge forward," said Board member Kaye Kilburn. "We need to make a strategic decision, not a tactical one."

"We have to address the issue soon, but we don't have the data to do so now," Carter insisted. "It will take some effort, to go from basic research in prevention to the first steps in applied prevention to broader steps in prevention."

"Those of us in prevention and control will say, 'Here we go again,'" Breslow commented. "There's a $5 million cut to be made, and we're going to be co-opted again."

Terry said the Board's next meeting in January would be early enough in the fiscal year to decide how to make the cuts.

Carter named four subcommittees to take on the range of issues facing the division, to report at the January meeting. Moertel will chair a group to study cancer center core grant guidelines (see previous article); Breslow will head the subcommittee to look at the problems in outreach (he said he prefers the word control), which will include community oncology, clinical groups, and other issues; Wynder will head a group to assess the "broad opportunities in prevention," Carter said; and Carter will chair a subcommittee on chemoprevention.

Carter further charged Breslow's group to develop a definition of cancer control. "Start with a clear cut definition. What should the division be doing?"

"POLLYANNAISH" TO EXPECT $20 MILLION FOR CONSTRUCTION, TERRY TELLS BOARD

The National Cancer Advisory Board two years ago completed a survey of cancer research facility needs throughout the nation and concluded that more than $100 million in NCI matching funds would be required to meet those needs. The Board unanimously approved a resolution asking the NCI director to include $20 million a year for five years for construction.

Further, the resolution suggested that the director should reprogram funds from other areas if necessary to come up with the $20 million each year. In fact, the opposite has been happening.

Each of the two bypass budgets which have been submitted to the White House since the NCAB's action have requested $20 million or more for construction. The 1982 bypass budget which went to the President last month had $21 million for construction grants.

However, when the President's budget as submitted to Congress slashed NCI's total request for the 1980 fiscal year severely, NCI executives cut in half the amount originally budgeted for construction, to $11 million. When the same thing happened to the bypass budget total for the 1981 fiscal year, NCI all but wiped out the construction program. The fiscal year which began this week will see only $1 million in construction grants awarded unless some reprogramming is done.

NCI staff members are not confident that it will get any better in 1982. It would be "Pollyannaish to suppose that construction will get $20 million in 1982," William Terry told the Div. of Resources, Centers & Community Activities Board of Scientific Counselors.

Board member Anthony Miller asked if construction did not still have NCAB support. "Yes, Terry said. "The lesion is elsewhere."

Not only was the 1980 construction budget cut to $11 million, but NCI was not able to award that entire amount. It appears that many institutions were unduly pessimistic about their chances of being funded and did not submit construction grant applications. The construction program had to let $186,397 go elsewhere.

Here are the awards NCI made in the 1980 fiscal year:

Univ. of California (San Diego), $965,367; St. Jude Children's Research Hospital, $901,956; Michigan Cancer Foundation, $300,000; Harvard Univ., $111,450; Cornell Univ., $169,500; Johns Hopkins Univ., $2,894,827; Roswell Park Memorial Institute, $645,300; Fred Hutchinson Cancer Research Center, $4,603,673; and Univ. of Minnesota, $221,530.

A major portion of the needs projected in the NCAB survey was to permit institutions to meet federal biohazard containment regulations and animal facility requirements. Many of those institutions are not presently in compliance with the law. Other institutions need extensive renovations to meet state and local codes.

"How much distance is there between what people say they would like to have and what they need?" DRCCA Board member Peter Greenwald asked.

Donald Fox, chief of the Research Facilities Branch, said that the estimates had been discounted just for that reason. The estimate of $100 million total represented an even further reduction—that was the amount projected as the peer review approved total, approximately half the amounts expected to

be requested in grant applications.

The construction program was one of the mandates in the National Cancer Act of 1971. NCI originally required only 25 percent contribution of nonfederal funds for approved projects, but increased that to 50 percent four years ago. Since the program's implementation, NCI has provided $56.9 million in construction funds for projects which have been completed while requiring $21.9 million in matching amounts. The grantees actually did better than that, adding $33.7 million in nonfederal money. The completed projects were all funded under the 75-25 ratio.

Board member Charles Moertel said that the institutions funded in 1980 "have good fundraising capabilities. How do you rank the need for this (NCI construction support) vis a vis cancer control, and other needs?"

"It's easier to get money for construction in private fundraising efforts," Fox admitted. "People like to have their names on buildings, over doors. But there is a lot of work that will not start until there is some promise of federal support."

"Even if you assume you can take everything on the wish list and leave it all up to private funding, donors won't give money for biohazard control," Terry said. "Names on hoods won't do it."

"People are not too crazy about having their names on a mouse house, either," Fox added.

Board member Harry Eagle said that a new facility at his institution would not have been possible without the NCI grant. "Money followed NCI money. The Cancer Program will be in trouble if we do not get reasonable construction funds."

New Publications

FIRST REPORT ON CARCINOGENS NOW AVAILABLE FROM NTP; COMMENTS ASKED

The "First Annual Report on Carcinogens," a report ordered by Congress as an amendment to the National Cancer Act in 1978, is now available. Free copies may be requested from:

Steven d'Arazien, Public Information Office, National Toxicology Program, P.O. Box 12233, Research Triangle Park, N.C. 27709.

The report provides the available exposure data and the regulatory history of 26 chemicals and industrial processes which the International Agency for Cancer Research has examined with respect to the induction of cancer in humans. For each of the 26, the report summarizes available estimates of how many people are exposed and how they are exposed. It provides available evidence of carcinogenicity as demonstrated by animal and human studies.

The report also contains tables for each of the chemicals and industrial processes, providing information on domestic production and imports; how the product or process is used; the number of people exposed as well as the route, frequency and level of exposure, and the applicable federal regulations and their effect in reducing exposure.

The 26 chemicals and industrial processes fall into the following categories:

–Naturally occurring chemicals. The aflatoxins are the only chemicals on this list where exposure is principally from natural sources. Other chemicals on this list also exist in nature to some degree but their principal source of exposure is elsewhere.

–Industrial chemicals. This category includes 4-aminobiphenyl, arsenic, asbestos, auramine, benzene, benzidine, bis9chloromethyl)ether and chloromethyl methyl ether, mustard gas, 2-napthylamine, soots, tars, oils and vinyl chloride. All of these except auramine were classified by IARC as being carcinogenic for humans, with auramine as probably carcinogenic for humans with lower degrees of evidence.

–Industrial processes. Those discussed in the report are cadmium and cadmium compounds, chromium and chromium compounds, hematite, and nickel and nickel compounds.

–Industrial byproducts. The only ones considered in this report are the isopropyl oils, which are formed during the manufacture of isopropyl alcohol.

–Pharmaceuticals. This category includes N,N-bis-(2-chloroethyl)-2-naphthylamine, chlorampenicol, cyclophosphamide, diethylstilbestrol, melphalan, oxymetholone, phenacetin, and phenytoin.

Comments and suggestions concerning the report are invited and should be sent to the Director, National Toxicology Program, at the above address.

Other new publications recently released include:

"Cancer Screening Film Series," produced by the Cancer Prevention & Detection Program at M.D. Anderson as training films designed to expand all levels of health professionals' cancer screening and assessment skills. The four films–"The Breast Assessment," "The Cancer Detection Interview," "The Gynecological Assessment," and "The Head and Neck Assessment," are available at a short term rental fee of $40 each or for purchase at $350 each from the Dept. of Medical Communication, UTSCC, M.D. Anderson Hospital & Tumor Institute, 6723 Bertner Ave., Houston 77030.

"Renal Adenocarcinoma," a series of workshops on the biology of human cancer, edited by G. Sufrin and S.A. Beckley, $17 Swiss Francs, from Managing Editor, UICC, 3 rue du Conseil-General, CH 1205 Geneva, Switzerland.

"Colorectal Cancer: Prevention, Epidemiology, and Screening," edited by Sidney Winawer, David Schottenfeld, and Paul Sherlock, $39.50; and "Malignant Solid Tumors in Children: A Review," by Wataru Sutow, $20; both from Raven Press, 1140 Avenue of the Americas, New York 10036.

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. Address requests to the Contracting Officer or Contract Specialist named, Research Contracts Branch, National Cancer Institute, Blair Building, 8300 Colesville Rd., Silver Spring, Md. 20910. Deadline date shown for each listing is the final day for receipt of the completed proposal unless otherwise indicated.

RFP 223-81-6001

Title: *Radiological health sciences education report*
Deadline: *Approximately Nov. 6*

Expand, refine and further implement the Radiological Health Sciences Learning Laboratory, in part, by such actions as developing a physics section for the file, preparing new master file materials as changes and additions occur, establish and manage activities of expert panels of physicians to develop referral criteria/statements on use for various x-ray examinations.

Timothy Ashley
DHHS Public Health Service/Food & Drug Administration
514, 5600 Fishers Ln., Rm 12A05
Rockville, Md. 20852

NCI CONTRACT AWARDS

Title: Carcinogenicity studies in rodents
Contractor: EG&G Mason Research Institute, $1,383,485.

Title: Culture of long term tumor-specific cytotoxic lymphocytes for use in the treatment of mouse leukemia, continuation
Contractor: Dartmough College, $109,314.

Title: Immunoprophylaxis of 'cancer eye' in cattle, continuation
Contractor: Utah State Univ., $87,189.

Title: Five alteration/renovation/maintenance/upgrading projects at Frederick Cancer Research Center, modification
Contractor: Litton Bionetics, $170,633.

Title: Morbidity in childhood cancer survivors and their offspring
Contractors: State of California, $498,445; Univ. of Iowa, $167,483; Univ. of Texas System Cancer Center, $498,890; Yale Univ., $427,630; and Univ. of Kansas, $437,240.

Title: Rescue of human SRC genes, continuation
Contractor: Univ. of Southern California, $175,500.

Title: Immunoprevention of natural and induced tumors in wild mice, continuation
Contractor: Univ. of Southern California, $476,594.

Title: Immunoprevention of cancer in cats, continuation
Contractor: Univ. of Southern California, $230,000.

Title: Immunogenic and virological study of leukemogenesis in the AKR mouse, continuation
Contractor: Sloan Kettering Institute, $230,190.

Title: Study of cancer in veterans, continuation
Contractor: National Academy of Sciences, $256,125.

Title: Cancer in Louisiana case control study of lung, pancreas, and stomach cancer in Southern Louisiana parishes, continuation
Contractor: Louisiana State Univ. Medical Center, $359,367.

Title: Detroit population based cancer registry, continuation
Contractor: Michigan Cancer Foundation, $1,783,168.

Title: Maintenance of chimpanzees for cancer research
Contractor: New Mexico State Univ., $48,000.

Title: Support services for the Laboratory of Viral Carcinogenesis, continuation
Contractor: Meloy Laboraratories, $42,000.

Title: Animal morbidity/mortality survey of colleges of veterinary medicine in North America
Contractor: Assn. of Veterinary Medical Date Program Participants, Inc., $134,000.

Title: Support services for radiation studies
Contractor: Systemedics, Inc., $896,143.

Title: Studies on environmental cancer utilizing a prepaid health plan, continuation
Contractors: Kaiser Foundation Research Institute, Portland, Ore., $89,808, and Kaiser Foundation Research Institute, Oakland, Calif., $90,000.

Title: Production of antineoplastic compounds using fermentation, biotransformations and co-metabolism techniques
Contractor: Univ. of Iowa, $363,000.

Title: Antigens of human lymphoid organs: Immunogiadnosis of leukemias and lymphomas
Contractor: Univ. of Minnesota, $43,584.

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