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1411 ALDENHAM LANE RESTON, VIRGINIA TELEPHONE 703-471-9695

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COMPLAINTS ARE "ASTONISHINGLY FAR FROM FACTS," BUT NCI MAY BE LEAVING GOOD SCIENCE UNFUNDED

The budget squeeze which this year will permit NCI to fund only 30% of approved new grants and 40% of competing renewals has generated an unprecedented amount of mail for Benno Schmidt. As chairman of the President's Cancer Panel, Schmidt has become the No. 1 target for complaints about how the Cancer Program is being run and for suggestions on how to improve it.

Many of the complaints are based on an alleged lack of support for basic research. "What is striking, absolutely astonishing, is how far many of the letters are from the facts," Schmidt told the Panel.

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In Brief

CONSTRUCTION GRANT APPLICATION DEADLINE FOR 75-25% FUNDING OCT. 1; FORDHAM QUITS

DEADLINE for construction grant applications to qualify for the 75-25% formula (with NCI paying 75%) is Oct. 1, 1977, for the review cycle which ends Feb. 1, 1978. Some confusion was created when NCI moved the deadline from June 1 to Oct. 1. NCI decided that those already in the process of drawing up their applications should have that extra time to qualify for the more generous grant. Applications received by NCI after Oct. 1 will be subject to the new 50-50 formula. . . . **CHRISTOPHER FORDHAM III**, who had agreed to accept the assistant secretary for health job and had actually been working at it as a consultant while waiting Senate confirmation, changed his mind last week. Miffed because HEW Secretary Joseph Califano was making all the significant health decisions, Fordham quite and went back to his job as dean of the Univ. of North Carolina Medical School. . . . **CALIFANO MAY** be sorry he didn't leave Ted Cooper in that job, as most of Cooper's colleagues had hoped he would. Cooper is still a commissioned officer in the Public Health Service with the rank of asst. surgeon general, works out of an office at NIH. . . . **ACS NATIONAL** Conference on Cancer Nursing will be held May 9-10 in St. Louis. Among topics to be discussed are ethical considerations in prolonging life; sexuality and the cancer patient; new developments in hospices, home care and self care; and advanced techniques of pain management including biofeedback and hypnosis. . . . **BENNO SCHMIDT**, chairman of the President's Cancer Panel, on NCI's problems with FDA over testing new anticancer drugs: "I think the secretary (Califano) is a problem solver. He gets into problems effectively and fast. I think that with this secretary and a new director at FDA, we'll resolve those problems fast, in such a way as to permit the kind of progress we've had in the past. In any case, we're ready to work on that problem with you (Div. of Cancer Treatment Director Vincent DeVita) anytime you and Guy (Newell, acting NCI director) feel the time is propitious."

APPLICATIONS AND MONEY GROW, BUT NCI FUNDS EVER DIMINISHING PERCENTAGE

(Continued from page 1)

Earle Browning, chief of NCI's Financial Management Branch, prepared a set of figures demonstrating NCI's support of basic research since the National Cancer Act was adopted in 1971. Browning also drew up figures which show how deep the 1977 budget squeeze is cutting into grant support.

In 1970, the last year before the Cancer Act resulted in big appropriations increases, NCI provided $98.5 million for basic research, 56.3% of the institute's budget. In 1977, NCI support to basic research totals $397.6 million, 48.8% of the budget.

Excluding cancer control, which is a separate item in the authorization and appropriations bills and specifically was not intended for basic research, the percentage of NCI's budget this year going to fundamental research is 52.2%.

"These figures demonstrate that there is no attitude here that the Cancer Program has all the fundamental knowledge it needs to attack the cancer problem," Schmidt said. "To say otherwise demonstrates a lack of knowledge of the people here and of the facts."

The problems have arisen, Schmidt said, "because the demand for these funds, in every area, has grown. Through 1975 we were able to live happily with that demand because our funds were growing. Every phase could grow and we could deal with it satisfactorily. In 1976 and 1977, there has been a leveling off. In constant dollars, we've actually had a declining budget."

Here's how the squeeze has affected traditional research grants in 1977, compared with previous years from 1970:

	New Approved (In Millions)	Competing Renewals Approved (In Millions)	New Funded (In Millions)	Competing Renewals Funded (In Millions)
1970	332, $12	219, $10.1	89, $3.8	110, $5
1971	331, $11.8	249, $11.7	164, $5.6	155, $7.9
1972	564, $24	212, $11.6	346, $15.4	132, $8.1
1973	674, $32.2	160, $10.3	331, $16.5	100, $7.3
1974	886, $44.7	237, $16.5	477, $26.8	186, $14.1
1975	955, $46.3	316, $21	563, $29.3	234, $17.1
1976	894, $46.4	337, $24	372, $21.3	220, $17.3
1977	999, $52.8	460, $35.3	299, $18	187, $15.4

The percentage of approved new grant applications funded rose from 26.8% in 1970 to a high of 61.3% in 1972, held at or above 50% for the next three years and then dropped to 41.6% in 1976 and to 29.9% this year.

Competing renewals were funded at 50% of approved applications in 1970, jumped to 62% each of the next three years, to 78.5% in 1974 and held at respectable 74% and 65.3% in 1975 and 1976. But they fell to 40.7% this year.

"There's nothing you can say to the guy who was approved but unfunded," Schmidt said. "The closer he was (in priority score) to the funding line, the unhappier he is, particularly if his score is high enough that in previous years would be funded. There is no explanation you can give him that is going to make him happy. If he was at 51% and the funding was cut off at 50%, no one would listen to him. No one is eager to advertise that he was almost in the top one half. But if he was almost in the top one third, that's something else.

"The problem is that we're probably losing a lot of good research, if we're funding at only 30%, in that group between 30 and 50%."

The situation "if anything is even more desperate" with program projects and core grants, Schmidt said. From 1970 through 1975, 100% of approved competing renewal applications for program project and core grants were funded. That dropped to 93.8% in 1976 and 68.5% in 1977.

Approved new program project and core grants were funded at 100% in 1970 (when 10 applications were approved) to 0% this year, when 63 applications were approved but none will be funded.

Money awarded to core and program project grants rose steadily from $4.8 million in 1970 to $38.5 million this year, not counting funds going to noncompeting renewals. There are 37 competing renewals being funded this year, compared with six in 1970.

Browning pointed out that program project and core grants in FY 1976 and 1977 generally were funded below recommended levels. Also, lower priority components of program projects are often not funded, resulting in a reduced level of support but with no reduction in the number of grants awarded.

The total budget for program projects in 1977, including noncompeting renewals, is $80.7 million; for core grants, $57 million.

Program project and core grants "by and large involve those institutions that are committing themselves to a substantial amount of cancer research, over a long time," Schmidt said. "Everybody has gotten geared up, built labs, brought in people, extended programs, and then the cutoff comes. Either total non funding, or highly reduced funding. It comes as a shock and starts everyone asking, 'Where is the money going?' They say, 'My work has become more significant, more exciting, better than it ever has been, but I'm not being funded, or my funds are being cut.' Then they hear that $27 million is going to the Frederick Cancer Research Center 'so we will be prepared to take advantage of a breakthrough when and if one comes.' Anyone who thinks that must think we do not know what we're doing."

Schmidt was referring to a letter published in the *New York Times* March 24 from Ruth Sager, professor of cellular genetics at Harvard and chief of the Div. of Cancer Genetics at the Sidney Farber Cancer Institute.

Sager wrote that the NCI program "suffers from the illusion that there exists enough basic knowledge

about cancer on which to build an applied program. It is as if there had been a huge government program to put a man on the moon in 1920, before missiles were invented. Contracts would be given to cannon manufacturers, ladder builders, and many, many administrators to set up committees, support facilities, and backup team, but there would be no support for missile research.

"Far too much of the NCI budget," Sager continued, "goes to industrial firms awarded large contracts for questionable projects. For example, some $27 million in contracts was recently awarded the Frederick Cancer Center 'to take advantage of the breakthrough in cancer' when it occurs. Meanwhile, the research effort needed to make that breakthrough is going begging. For lack of funding, the heart has gone out of some of the most creative scientists, and research teams in university laboratories that provide the basic new knowledge so desperately needed if the conquest of cancer is to have any hope of substantive success are being disbanded."

Sager said that NCI "needs to be taken away from the businessmen and managers who have milked it, some out of greed and some from ignorance, and given back to the scientists who are talented, innovative, and dedicated to solving the cancer problem."

For one thing, Sager vastly understated the amount of money NCI spends at FCRC. NCI is spending about $25 million *per year* on its contract with Litton Bionetics. For another, no one at the Panel meeting acknowledged ever saying the former Army biological warfare facility at Ft. Detrick was taken over by NCI to provide a facility 'to take advantage of a breakthrough.'

Now that most of the renovation and construction has been completed at FCRC, most of the money spent there will go to provide resources for various elements of the Cancer Program—viruses, antisera, experimental animals, reagents, drugs, assorted chemicals. Some of those resources will go to NCI intramural scientists for use in their work, and much of it will go to NCI grantees and contractors, supplied at no charge.

"If this work was not done at Frederick, it would be done somewhere else," commented NCI Acting Director Guy Newell.

"Presumably at a higher cost, or it wouldn't be done at Frederick," Schmidt said.

Schmidt said that "if we eliminate the mythology in the letters (of complaint), and get to points worthy of consideration, they think the money is going to three places that ought to be reviewed and looked at. One, contracts that represent extensions by intramural scientists of their own activities. That's not good policy. That money ought to be in the grants pool for competition.

"Second is the whole area of contract research. The feeling is that it does not compete on the same terms as grant researchers. Contract researchers stack up with grantees, and sometimes they are the same, they do both. Contract review committees are as good as grant study sections. That's not the argument. Study sections must first pass on the issue, is this good research and should it be done, before they determine if a particular applicant should be funded to do that work. With a contract, that issue has already been decided by the time it gets to a review committee."

Louis Carrese, NCI associate director for program planning & analysis, pointed out that contract review committees also consider priority, relevance and need. But Schmidt said he still felt it is "harder to come off with a verdict, yes this is good research and should be done," in the study sections.

FCRC is the third major area which Schmidt said constantly is brought up for criticism in letters he receives. "There is an enormous misapprehension about Frederick."

The only part of the FCRC budget not being spent on resources for the scentific community is $3.5 million for the basic science program, headed by Michael Hanna. Schmidt said that program "was put there at the insistence of the National Cancer Advisory Board and of basic scientists who said that without scientists there giving it an atmosphere of scientific excellence, we wouldn't get quality resources."

Schmidt turned to NCI's Virology Program and mentioned the report submitted three years ago by a special committee headed by Norton Zinder which recommended substantial changes in the program.

"We didn't follow the policy conclusion of the Zinder report," Schmidt said, "although we did accept and put into effect its suggestions for improving the contract program. The policy conclusion was that viral oncology funds should be put into the grants pool, and let virologists compete with others. They all believed that virology has come of age, that it does not need artificial stimulus, and that if we phased out all these contracts and put the money into grants, we would get just as good research, and about the same amount of it. NCI and Jim Peters (director of the Div. of Cancer Cause & Prevention) have done about all you can to make a contract program as acceptable as it can be, but we still hear the criticism. Why contracts? We don't need the stimulation now. The answer is that in virology, we had a good contract program going, to make a switch would disrupt it, and it wasn't worth it. But that's not a good reason for having an immunology contract program."

"It's the same as with virology," Peters argued. "If you have a targeted program, you can do it better and quicker with a contract."

"You can't clear contracts much faster than grants now," Schmidt said. "Are NCI ideas any better? Can you justify a targeted approach in immunology?"

"We don't operate in a vacuum," Peters answered. "We get a lot of outside advice on contract programs."

"But is a committee determination of where to go better than the sum total of the scientific community?" Schmidt asked. "My own attitude is, I've moved away from targeting toward investigator-initiated research. I don't have much faith in committees, however skilled, in determining what science others should do. That's just the view of one man who's never been at the bench, and never conceived a new scientific idea.

"If you're going to have a contract program, the less targeting in it, the better I like it. The thing that is commendable about the virus and immunology programs is that a great deal of investigator initiated research is permitted in the contracts. It makes no difference if it is a grant or a contract. Sol Spiegelman gets to do what he wants to do, and it doesn't make any difference to him how he gets his paycheck or reimbursement check, from a contract or a grant."

Panel member Paul Marks commented that if there is a high quality traditional research grant application in basic science that is not being funded, "there is no justification for a contract in that area."

Schmidt responded that "my position is that of the Zinder committee. But others will say that peer review is not all that good, and that gaps may exist" that can be filled in with contracts. "There may be blackouts in study section operations that you can help cure and correct with contracts."

FINAL COMMUNITY PROGRAM MAKEUP EMERGES; WISCONSIN, PITTSBURGH OUT

Now that the Long Island Cancer Council has officially been awarded a $6.5 million, five year contract for implementation of its Community Based Cancer Control Program, the final makeup is starting to emerge of the most ambitious and controversial effort yet undertaken by NCI's Div. of Cancer Control & Rehabilitation.

Long Island is the third community to move into the implementation phase of the CBCCP and the first to have done so from a planning contract. The first two—Michigan Cancer Foundation in Detroit and the Univ. of New Mexico Cancer Research & Treatment Center—were awarded implementation contracts directly without the planning support.

Of the nine organizations that did receive planning contracts, four are now out of the picture, or nearly so. The Univ. of Wisconsin and the Univ. of Pittsburgh are the latest casualties. Wisconsin's application for implementation was disapproved following review by the Community Activities Review Committee.

Pittsburgh pulled out voluntarily after its proposal was returned with suggested changes, deciding not to ask for another review.

The Rochester, N.Y., and Seattle proposals for moving from planning to implementation had previously been disapproved.

Wisconsin is considering going ahead on its own to develop a new proposal, although NCI's action cuts off any further planning funds. If a new proposal is submitted, NCI is obliged to review it.

Here is the status of the remaining four with planning contracts:

Rhode Island—Final proposal due today (April 29). The Community Activities Review Committee has approved it for implementation, provided certain requirements were met, and NCI staff can proceed with contract negotiations without further committee action. The tentative schedule calls for negotiations to be completed by June 20 and the contract awarded by July 20.

Los Angeles—Final proposal due May 2. The committee has approved it for implementation, and no further committee action is necessary. Tentative schedule calls for negotiations to be completed by June 1 and contract award by June 30.

Hawaii—Final proposal is due May 15. The committee has not given its approval for implementation and will review the proposal June 15. If approval is forthcoming, the contract will be negotiated by July 20 and awarded by Aug. 27, unless there is need for further revisions in the proposal.

Connecticut—This effort has been beset with problems since the original principal investigator, Barbara Christine, died of cancer before the planning phase was hardly under way. But NCI has been impressed by the spirited attempts to overcome that and other setbacks and still gives the proposal an outside chance of gaining approval. "They've shown a terrific ability to pull their chestnuts out of the fire," said Ruby Isom, chief of the Community Resources Development Branch.

The final lineup then in the CBCCP will definitely include New Mexico, Detroit, Long Island, Los Angeles and Rhode Island, probably will include Hawaii and might include Connecticut.

Ray Crampton, an oncologist in private practice and current president of the Long Island Medical Society, is principal investigator for the Long Island Cancer Council. John Dibeler, who was PI through most of the planning phase, gave up that role to become a subcontractor in the program.

The proposal developed by Dibeler and his colleagues requested a total of $12.2 million from NCI over the five years. This was cut almost in half in negotiations, to $6,522,900, and the contractor is obliged to match that amount.

The contract starts with $1 million in the first year, $1.4 million in the second, $1.4 million in the third and $1.5 million in the fourth. The final year it drops to $1.2 million, a gentle step in the process of weaning the program away from federal support. All CBCCP contractors will have definite plans for continuing the program without NCI support after five years, before the implementation contracts are awarded.

The contract summary describes the Long Island

program:

"The Long Island Cancer Council will implement a CBCCP in Suffolk and Nassau counties of Long Island. This is an integrated demonstration and education program in cancer control directed toward groups at high risk from cancers of the breast, prostate, colon-rectum and uterine-cervix cancers. It will seek to bring cases found to a definitive diagnosis and referral to high quality treatment with followup and rehabilitation/continuing care where appropriate, based on the hypothesis that such a coordinated approach will result in better outcomes for cancer patients.

"The overall thrust of the CBCCP is the transfer of the latest cancer control technology to health practitioners and other relevant persons in the various communities, through the coordinated collaboration of the lay and medical communities. It is understood that while reducing morbidity and mortality is a long term goal, short term goals must of necessity focus on increasing public knowledge about cancer, changing behavior, detecting cancer at earlier stages, improving the practices of health professionals and providing more comprehensive and humane care to cancer patients.

"After an initial assessment of cancer control gaps and needs, the Council has developed site and intervention programs. For the first year of the program, there are several subcontractors developing site and intervention programs.

"From June 1975 to June 1976, the Long Island Cancer Council completed the phase I tasks required for implementation. These included assembling demographic and epidemiologic information relevant to the community; selecting disease sites for emphasis; developing the organizational and community relationships necessary for broad involvement and support of the program; designing a coordinated and integrated plan for cancer control which addresses the gaps and needs uncovered during the planning process; and developing a surveillance system and data base adequate for evaluation. The plan was submitted in August, reviewed by the Community Activities Review Committee, site visited and approved in October 1976. Since that time, the Long Island Cancer Council has been engaged in restructuring its board committee and management structure; developing and evaluating plan; revising site and intervention plan; negotiating subcontracts; and phasing in both the data system and projects.

"Projects will include:

"Detection—ACS will subcontract to provide the public and professional education components of the program. Brookhaven and North Shore Hospitals and the Nassau Dept. of Health will offer screening and education to high risk and medically indigent persons. Adelphi School of Nursing is developing an oncology nursing curriculum.

"Diagnosis and Treatment—The Council will sponsor tumor registrar seminars and coordinate treatment protocols. Brookhaven Hospital is responsible for patient education. Nassau County Medical Center will establish an ambulatory oncology center for the multidisciplinary care of cancer patients.

"Rehabilitation and Continuing Care—Cancer Care Inc. will offer casework counseling and home care to terminal cancer patients. ACS will provide multi-site cancer counseling to assist cancer patients and their families in coping with the physiologic, psychologic and socio-economic problems associated with cancer. Community mental health clinics will subcontract to conduct special psychosocial programs for those coping with death and bereavement.

"Evaluation is under the direction of experienced faculty at the State Univ. of New York at Stonybrook."

Detection projects to be carried on by subcontractors, the population served by each, type of activity, and NCI funds for each in the first year:

North Shore Hospital—500-700 at risk over 40 in North Hemstead. Hemoccult, Pap, endometrial biopsy, digital exam, BSE education and followup. $44,000.

South Nassau Hospital—3,000 medically disadvantaged senior citizens in South Nassau Hospital area. Hemoccult, proctoscopy, digital exam, Pap, vakutage, small group counseling, education, community outreach, $41,000.

Nassau County Health Dept.—800 medically indigent over 50 at Freeport-Roosevelt Health Center. Hemoccult, proctoscopy, breast & prostate exam, cervical, pelvic, uterine, Pap, serology, health education and followup, $20,000.

Brookhaven Memorial Hospital—3,400 in area at risk in four sites, 1,200 screening and detection, 2,200 previous counseled. Colo-rectum, prostate exam, breast and cervical uterine, health education and counseling, professional education, $24,000.

ACS—1,511 patients. Group therapy, rehabilitation, continuing care and counseling. $41,000. This includes Reach to Recovery, colostomy clubs counseling patients; social worker to evaluate families, conduct group sessions, home counseling; telephone followup; home care services; equipment; drugs and dressings, family education; postoperative counseling for patients and family; group therapy and prosthesis development; at home visits by enterostomal therapists, in-service at hospital by enterostomal therapists.

Cancer Care—250 patients, 625 family members. Counseling and home care, $62,000.

Brookhaven Hospital—500 patients. Individual and group counseling and patient education, $85,000.

Contractor to be selected—advance cases. Home care. $20,000.

Education projects:

ACS—high risk population, patients, target groups. Public education, industrial health programs. $103,000.

ACS—Physicians and medical students, nursing home administrators, schools of nursing, hospitals. Professional education. $28,000.

Adelphi Univ.—30 regular nurses. Nurse oncology training. $30,000.

The Nassau County Medical Center is the only subcontractor for treatment projects. Its patient population will be drawn from medically indigent persons. Efforts will include an ambulatory multidisciplinary care unit, professional education and pretreatment evaluation. NCI funding will be $42,000 in the first year.

ACS is the subcontractor for referral service, offering telephone information and patient referral to the general population. NCI funding is $27,000 for the first year.

The SUNY subcontract for evaluation is $112,000. The Council will receive $306,000 for its core activities, to include coordination, program administration and management, monitoring of subcontracts, data management, and communication.

ACS SAYS NCI MUST HAVE $1.1 BILLION "TO EXPLOIT MAGNIFICENT RESEARCH"

An appropriation of $1.1 billion for NCI in the 1978 fiscal year "is needed, there is a crying need for it, to exploit the magnificent research work that has begun to issue from the Conquest of Cancer Program," George Rosemond, past president of the American Cancer Society, told the House and Senate HEW appropriations subcommittees.

Rosemond's statement included the "Citizens Budget," prepared by ACS and other organizations, which asks for $150 million more than NCI had requested for 1978 and $285 million more than the Ford and Carter Administrations had requested.

"We can't keep this machinery going on the practically level funds we're now getting from Congress," Rosemond said.

Rosemond told the Congressmen that "the exciting news of the year is that we have indisputable proof that vitamin A derivatives—retinoids—reverse the transformation of precancerous cells to cancer in laboratory animals. . . . We have reason to believe that the treatment will apply to humans. Further, we are especially optimistic because the chemistry of retinoids has improved a great deal. We have forms of the chemicals that were previously unavailable."

Rosemond was referring to work headed up by Michael Sporn, chief of NCI's Lung Cancer Branch. Using synthetic retinoid analogs supplied primarily by Hoffmann-LaRoche, Sporn and colleagues at NIH, IIT Research Institute, and Microbiological Associates have shown that they can prevent cancer of the lung, bladder and breast. NCI has recently issued a series of RFPs for further development of retinoids.

In describing his work to the Carcinogenesis Program Advisory Committee and to science writers, Sporn warned that natural retinoids such as vitamin A, which can be purchased over the counter, are not effective for cancer prevention. They do not reach the desired target organs in sufficient quantities, and they are stored in the liver in excessive amounts, where they can cause severe toxicity.

Rosemond told the appropriations committees, "We are ready for a clinical trial. One of the major pharmaceutical manufacturers is ready. The Bladder Cancer Task Force is ready. The scientific staff is ready. The patients are, shall we say, tragically ready."

A second advance ACS believes is of outstanding importance is in cancer control, Rosemond said. "I am pleased to report to you a practically unprecedented accomplishment under federal funding of cancer control projects. For the first time that I know of, one entire segment of cancer treatment, in this case radiology, has been surveyed to find out what therapy is being given, where it is being given, to what classifications of patients it is being given, how that therapy compares with standards of optimum treatment, and what is the outcome of that therapy.

"We thus have the basis for evaluating and then upgrading, where necessary, an entire field of cancer therapy. Further, we have the mechanisms, now, where we can feed directly into radiotherapy facilities all over the country whatever scientific improvements come from research in the future."

That project was headed by Simon Kramer, Thomas Jefferson Univ., who surveyed 1,010 radiotherapy facilities in the U.S.

"The project won a major victory by bringing together an authoritative group of therapists to describe diagnosis and treatment categories to be used as standards," Rosemond said. "Imagine, we have here a group of doctors setting explicit standards of medical care and, even more astonishing to many who are eternally ready to criticize what goes on in medicine, the doctors voluntarily submitting their work to the most intimate type of scrutiny and judgment.

"The next, and crucial, step was to measure the work done in a sample of 170 facilities from the universe identified in the survey.

"The work was centered on cancer of the breast, cervix uteri, corpus uteri, Hodgkin's disease, seminoma, anterior two-thirds of the tongue, floor of mouth, larynx, nasopharynx, bladder, and prostate. The study found that in some diseases, such as Hodgkin's, therapy was most often well within the authoritative standard limits. In other diseases there were wider variations.

"Now for the payoff. What all this leads up to is a physician education program. On the basis of these findings, NCI will be able to identify and evaluate departures from the standards and to find out their

impact on patients. They will also be able to design educational programs on the basis of the variances observed and defined gaps in treatment quality.

"In other words, the NCI Cancer Control Program has in place a system for continuing evaluation, continuing education, continuing improvement in radiotherapy, and continuing check on the outcome of treatment. This self-improvement tool is now built into the system.

"But what of chemotherapy? What of immunotherapy? What of rehabilitation? What of a whole variety of community hospital and comprehensive center attempts to prolong useful, productive life of the cancer patient?

"I have just discussed one study. We need many more. We cannot have many more unless realistic funding is available to the National Cancer Institute."

The Citizens Budget calls for $213 million for regular research projects, $119.4 million for program projects, $40 million for organ site task forces, $4.9 million for research career program, $8.9 million for radiation development research, $37 million for CREGs, $47.1 million for center core support and planning grants, $14.4 million for clinical education, $27.8 million for fellowships, $1.8 million for training grants, $38.7 million for construction, and $13 million for cancer control grants. Those were for grants, totaling $569.6 million. The budget asks $379.6 million for contract programs.

ADVISORY GROUP, OTHER CANCER MEETINGS FOR MAY, JUNE

6th International Congress of Cytology—May 2-5, Cancer Institute Hospital, Tokyo.

Cancer Control & Rehabilitation Advisory Committee Subcommittee on Cost Reimbursement—May 2, Landow Bldg Room C418, 9 a.m., open.

Subcommittee on Prevention—May 2, Landow Bldg Room C418, 2 p.m., open.

Subcommittee on Community Activities—May 2, Bethesda Holiday Inn, 7 p.m., open.

Cancer Control & Rehabilitation Advisory Committee—May 3-4, NIH Bldg 31 Room 7, 9 a.m. both days, all open.

Society of Surgical Oncology—May 4-8, Hilton Head, S.C.

Breast Cancer Diagnosis Committee—May 4-5, NIH Bldg 31 Room 8, open May 4, 8:30–9:30 a.m., May 5, 8:30–9 a.m.

Breast Cancer Epidemiology Committee—May 5, NIH Bldg 31 Room 9, open 8:30–10:30 a.m.

Breast Cancer Treatment Committee—May 5, Landow Bldg Room C418, open 8:30 a.m.–noon.

Breast Cancer Experimental Biology Committee—May 5-6, NIH Bldg 31 Room 9, open May 5, 8:30 a.m.–noon.

Drug Development Committee—May 6, NIH Bldg 31 Room 7, open 9–9:45 a.m.

Cancer Control Intervention Programs Review Committee B—May 6-7, NIH Bldg 31 Room 5, open May 6, 8:30 a.m.–noon, May 7, 8:30 a.m.–adjournment.

ACS National Conference on Cancer Nursing—May 9-10, St. Louis Chase-Park Plaza Hotel.

Advances in Treatment of Childhood Cancer—May 12, Roswell Park Continuing Education in Oncology, contact Claudia Lee.

Committee on Cancer Immunotherapy—May 12, NIH Bldg 10 Room 4B14, open 1:15-1:45 p.m.

Oncology Nursing Society Annual Convention—May 14-15, Denver Hilton Hotel.

American Society of Clinical Oncology Annual Meeting—May 16-17, Denver Hilton Hotel.

American Assn. for Cancer Research Annual Meeting—May 18-21, Denver Hilton Hotel.

International Conference on Prospects for Treatment of Lung Cancer—May 22-24, Airlie House, Va.

National Cancer Advisory Board Subcommittee on Centers & Construction—May 22, NIH Bldg 31 Room 6, open 1:30–6 p.m.

National Cancer Advisory Board—May 23-24, NIH Bldg 31 Room 6, open May 23, 9 a.m.–adjournment, May 24, 1:30 p.m.–adjournment.

NCAB Subcommittee on Budget & Planning—May 23, NIH Bldg 31 Room 11A10, 7:30 p.m., open.

6th Seminar on Dynamic Telethermography—May 23-26, Marseille.

Committee on Cancer Immunobiology—May 23-24, Landow Bldg Room C418, open May 23, 8:30–9 a.m.

Committee on Cancer Immunotherapy—May 24-25, Landow Bldg 13th floor conference room, open May 24, 8:30–9 a.m.

New Directions in Breast Cancer Management—Usefulness of New Clinical Tools—May 25, Bedford, N.H., contact Susan Baird, Dartmouth Medical School education coordinator.

Developmental Therapeutics Committee—May 26, NIH Bldg 37 Room 6B23, open 9–10:30 a.m.

National Center for Toxicological Research Science Advisory Board Bladder Cancer Subcommittee—May 27, North Little Rock Holiday Inn, open 9 a.m.–3 p.m.

Biometry & Epidemiology Contract Review Committee—May 31-June 1, Landow Bldg Room C418, open 7–11 p.m.

Data Evaluation Subgroup of the National Clearinghouse on Environmental Carcinogens—May 31, NIH Bldg 31 Room 6, 8:30 a.m., open.

Symposium on Etiology, Diagnosis and Treatment of Non-Hodgkins Lymphomas—June 1, Yale Univ., contact Alan Lebowitz or Marion Morra.

2nd International Symposium on Cancer Therapy by Hyperthermia and Radiation—Essen, Germany.

Management of All Stages of Colorectal Carcinoma—June 4, Roswell Park continuing education in oncology, contact Claudia Lee.

Present Status of Management of Prostate & Bladder Cancer—June 9, Roswell Park continuing education in oncology.

Workshop on Graduate Education in Oral Oncology—June 13-14, Bethesda Holiday Inn, 8:30 a.m. both days, co-sponsored by NCI's Div. of Research Resources & Centers and the National Institute of Dental Research.

Fourth Annual National Cancer Communications Conference—June 20-21, Chicago Pick Congress Hotel.

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 Section — 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 NO1-CP-75914-59

Title: *Isolation, identification and culture of epithelial cell types from bronchus, pancreatic duct, and colon of experimental animals*

Deadline: *May 31*

NCI is interested in obtaining a three year contract

with organizations having both the technical capability and interest to isolate normal epithelial cells from bronchus, colon, and pancreatic duct of experimental animals: bovine, primate and rat tissues are examples of animal source for these studies.

These isolates of specific epithelial cell types must be suitable for in vitro cultivation and for studies of carcinogen metabolism. It is anticipated that the information obtained in these studies will be applicable to the isolation of specific epithelial cell-types from corresponding human tissues; therefore, suitable animal models should be chosen to develop methodology.

It is essential that the methodology for isolating specific epithelial cell types be eventually scaled down to permit the isolation of these cells from small amounts of tissue containing a few million cells such as might be obtained in surgical specimens.

Expertise in a variety of disciplines and techniques will be required for successful pursuit of the objectives of the proposed contract. These include biophysical methods, cell sorting, immunology, cell culture and pathology. For this reason, it is strongly recommended that a collaborative team be considered with members or consultants drawn from necessary departments or even different institutions.

Proposals will be judged by individual task as well as in their entirety; should different respondents be judged to have strong proposals in complementary areas, they must be willing to collaborate in joint enterprise to attain the proposed objectives. Proposals may be written to include 1) Task I; or 2) Tasks I and II defined below. Task I) Developing methodology for isolating epithelial cells; Task II) Developing in vitro cell culture conditions.

Contract Specialist: Reginald Holloway
Carcinogenesis
301-427-7575

RFP NCI-CP-VO-71025-66

Title: *Holding facility for small laboratory animals*
Deadline: *June 1*

NCI is interested in contracting with a local organization to obtain facilities for handling and maintaining small laboratory animals. Existing facilities and space for new facilities devoted to small laboratory animal holding at the NIH Reservation are extremely limited. NCI is seeking to establish a small laboratory animal holding facility within a 30-mile radius of NIH, Bethesda, Md., for the direct support of NCI intramural research activities. The successful organization will be expected to daily maintain approximately 4,000 mice, 400 rats, and 400 hamsters.

Contracting Officer: Clyde Williams
Viral Oncology & Field Studies
301-496-1781

RFP-ES-77-22

Title: *Statistical development of multi-stage carcinogenesis models*
Deadline: *May 20*

The National Institute of Environmental Health Sciences is interested in receiving contract proposals from organizations with the interest and capability to successfully conduct research on statistical problems related to use of high dose rate data to estimate cancer risks at very low dose rates. It is estimated that the project will require two years to complete.

NIH
Research Contracts Branch
DCG Bldg 31 Rm 1B32
Bethesda, Md. 20014

SOLE SOURCE NEGOTIATIONS

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

Title: Preparation and purification of actinomycin analogs via directed biosynthesis
Contractor: Georgetown Univ.

CONTRACT AWARDS

Title: Support of activities of the U.S.A. National Committee for the International Union Against Cancer (UICC)
Contractor: National Academy of Sciences, $24,988.

Title: Chemical carcinogenesis and immunity
Contractor: Ohio State Univ., $146,873.

Title: Continue study of avian tumor viruses
Contractor: Life Sciences Inc., $532,740.

Title: Continue studies of tumor viruses
Contractor: Rush-Presbyterian Hospital, $121,225.

Title: Biomedical computing software services in support of the clinical and diagnostic trials program
Contractor: Information Management Services Inc., $102,563.

Title: Immunotherapy of disseminated human cancer
Contractor: M.D. Anderson Hospital, $35,169.

Title: NCI histocompatability testing center
Contractor: Duke Univ., $254,595.

The Cancer Letter—*Editor* JERRY D. BOYD

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