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

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NCI SEEN SHIFTING AWAY FROM COMPREHENSIVE CENTER EMPHASIS TOWARD ENCOURAGING CLINICAL EXCELLENCE

NCI's Cancer Centers Program, since the advent of the National Cancer Act, has seemed to be totally consumed with the business of encouraging, fostering, and financing the development of comprehensive centers. Those involved with the older existing centers as well as the emerging new ones, with some exceptions, have been led to believe that until they achieve comprehensive status, they're nowhere in the Cancer Program—a concept NCI insists never was correct.

Two recent events and the impending departure of Centers Program Director Simeon Cantril have combined to start NCI executives thinking about shifting the emphasis away from the drive to establish ever-

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In Brief

CHANCE FOR RAUSCHER PAY INCREASE BILL SEEMS DIMINISHING, BUT SCHMIDT REMAINS CONFIDENT

LEGISLATION authorizing pay increases for NCI, Heart & Lung Institute and NIH directors will be pushed now that Congress is back to work after the Easter recess. Chance of getting it passed appear to be less than 50-50; Congress doesn't seem to be in a mood to okay any pay raises. Strong support from around the country might help—write to Chairmen Paul Rogers and Edward Kennedy of the House and Senate Health Subcommittees, and to your own congressmen and senators. The National Cancer Program can't afford to lose Director Frank Rauscher at this time; yet, with three of his five children in college next fall, it will be impossible for him to remain at NCI unless he gets the raise. "It's rare for someone to serve in a somewhat controversial position, and be involved with all manner of disagreements, and after four years to have so far as I know the unanimous support of everyone he deals with," Benno Schmidt said of Rauscher. "It would be a monumental if not catastrophic loss if he leaves." The chairman of the President's Cancer Panel remains confident Congress will act favorably on the bill. . . . **ARNOLD BROWN**, chairman of the Dept. of Pathology and Anatomy at Mayo Clinic, has received permission from Mayo to take on the chairmanship of the new National Clearinghouse on Carcinogenesis. Brown's name has been mentioned as a possibility for the NCI directorship if Rauscher leaves. . . . **TIGHT DEADLINES** for responses to RFPs are being forced by NCI determination to obligate its FY 1976 funds by June 30. Proposers will have to work fast to stay on schedule. . . . **DIET-NUTRITION CREGS** (*The Cancer Letter*, April 9) have stimulated widespread interest, according to program director Gio Gori. NCI has received more than 150 letters of intent "and at least 500 phone calls" about the Cregs, Gori said. . . . **HYPERTHERMIA MEETING** scheduled by the Div. of Cancer Treatment for June 7-8, has been cancelled.

CANTRIL TO LEAVE AS CENTERS PROGRAM CHIEF JULY 1, WILL RETURN TO S.F.

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increasing numbers of comprehensive centers with the required capabilities:

- The General Accounting Office (the congressional watchdog agency) conclusion that comprehensive centers were not being evenly distributed geographically, as intended by Congress in the National Cancer Act.
- The addition of Ohio State and the impending addition of UCLA to the list of comprehensive centers and the fact that none of the others seeking recognition are close to meeting the requirements, except possibly New York Univ.

This will leave the number of comprehensive centers at 19 for some time, or 20 if NYU achieves recognition as seems likely by the end of next year. It will also leave huge gaps between comprehensive centers around the country, far short of the goal of having a center within 120 miles of a majority of Americans.

"We may have to change our thinking about this," NCI Director Frank Rauscher told *The Cancer Letter*. "We're never going to be able to have a full-fledged comprehensive center in every region of the country. I don't think that was the intent of Congress, at least not as we now define a comprehensive cancer center."

One of the characteristics, or requirements, for achieving comprehensive status is that a center must have "an environment of excellence in basic science which will assure the highest quality in basic research." That appears to be the major limitation in the number and distribution of comprehensive centers.

Rauscher and others feel that not only are there not enough basic scientists to staff basic research programs at every potential comprehensive center site; there is no need for that many full-fledged, acress-the-spectrum basic research programs. Also, many scientists are reluctant to move to some of the more remote sections of the country.

The basic science requirement was added by the National Cancer Advisory Board. "Congress was concerned that we have first-rate clinical facilities, so that every American will have access to the best treatment that current knowledge and technology make possible," Rauscher said. "I agree, and I think that's the direction we ought to go. At the same time we can continue to encourage those centers with the capability to strive for comprehensive recognition."

A new policy, if one is developed, thus would seem to lean toward emphasizing clinical excellence at strategically located centers, perhaps in a variety of settings.

Rauscher and Div. of Cancer Research Resources & Centers Director Thomas King were moved to do some new thinking about the centers program in part at least by the fact they will have to find a replacement for Cantril, who will leave July 1. Cantril will become director of radiotherapy at Children's Hospital in San Francisco and will work part time as director of the West Coast Cancer Foundation.

Jerome Vaeth, present director of the Foundation, is stepping down to become more involved in clinical activities. Cantril was Vaeth's deputy before going to NCI last year.

Cantril has some thoughts of his own about the future of the Centers Program. He plans to generate a discussion on that topic at a day-long meeting of the NCAB Subcommittee on Centers scheduled for June 4.

"We don't want to discourage the development of comprehensive centers, but they are not the total solution to the problem," Cantril said. "We should continue to encourage development of centers appropriate for their capabilities, their mission as they perceive it, and the needs of their regions. Maybe 25 years from now many will look like comprehensive centers without consciously or deliberately starting out to be comprehensive."

Cantril feels the Centers Program may evolve into recognizing four distinct types of centers, in addition to the comprehensive centers. "This is Cantril's thinking, not NCI's," he emphasized:

1. At the smallest level, center-like activities in community hospitals. "Call them community cancer centers if you want to," Cantril said. "Nci should take more of a role in fostering them, although I have mixed emotions on what that role should be. But we should recognize them, applaud them, help them."

2. Specialized cancer centers. "These we'll define differently. They may be centers dealing with specific problems." An example would be a coordinated effort in viral oncology within a department of a university, or a coordinated effort with a director and a purpose involving several departments. Another example in a clinical sense would be Henry Kaplan's program in Palo Alto—"a superb, well directed, well planned program." NCI ought to support "where the excellence is, let them pursue research efforts as best they can, but there is no need to scatter these around the country."

3. Multidisciplinary centers. These have broader capabilities but without a particular regional responsibility. "They are a national resource, with basic fundamental research all the way to applied clinical programs." An example is St. Jude's Hospital in Memphis, which Cantril said is a national resource in pediatric cancer but without any responsibility for outreach programs, cancer control networks, etc., for the Memphis area. NCI's policy here "should be passive. Fund it, support it, encourage it on the basis of merit, where it exists."

4. Regional cancer centers. "Call it that. Recognize the need for centers with strong clinical capabilities

in certain areas. Develop a forward plan, assign them responsibilities for outreach and control. Some comprehensive centers fit that now, but there are some very fine centers, and there will be more, that will never have the in depth basic research capability but can still serve as the regional focal point for treatment, control, education, rehabilitation."

There are some areas of the country which do not have the potential for a regional cancer center—Nevada, Montana, Wyoming, the Dakotas. "We need an alternative there—cancer control network, a series of community centers. It has to be something practical."

The recently-revised guidelines for the Cancer Centers Program leave plenty of room for the new emphasis expressed by Rauscher and Cantril. The guidelines note that NCI "encourages each institution to develop its own cancer center program in accordance with its own objectives and constraints. Different types of cancer centers have evolved through historical development by different approaches in a wide variety of institutions. Although criteria have been developed for characterizing comprehensive cancer centers, a cancer center is not required to develop to this extent nor is it required to aspire to be a comprehensive cancer center to qualify for NCI support."

King told ***The Cancer Letter*** that "the overriding need right now in the Centers Program is for stability and continuity" which he hopes to bring about by securing a director for it who will stay "for a respectable period of time." King said that both Cantril and his predecessor, John Yarbro, "contributed massively in broad areas." But Cantril had agreed to take over from Yarbro only with the understanding that he could return to San Francisco after a year.

"We're all looking at definitions of the Centers Program," King said. "We need to consolidate our gains, and to look at where we're going in the future." But that will have to await the hiring of a new program director. "The person we choose should have some input into this. If we set rigid parameters now, we may turn off someone we really want."

Denman Hammond, chairman of the NCAB Subcommittee on Centers and director of the USC/Los Angeles County Comprehensive Cancer Center, agreed that "lack of a definition of what the centers program is or is supposed to be" is a problem his subcommittee, the Board and NCI need to resolve. "The interpretation of what a center is varies with the constituency—OMB, Congress, the scientific community, and the public. During the last year, there has been a dilution of what a center should be."

Hammond referred to a chart displayed by NCI staff at a meeting of the President's Cancer Panel which listed a variety of institutions which receive NCI grants or contracts. The 97 institutions shown were referred to as "centers."

Hammond objected, insisting that "we don't have 97 cancer centers," and contended that this grossly inflates the amount of support NCI actually is giving to centers. "It seems to have become widely understood that the Centers Program is enormous, when in fact support has been lagging. The budget increase for centers in fiscal 1976 over 1975 was only 5.4%. That's a no growth budget, and in real dollars, is a decline." He feels that this may have dampened some NCI senior staff enthusiasm for the program.

King said that chart was intended only to show the flow of dollars to various institutions and was not intended to represent them as cancer centers.

Hammond said he "couldn't agree more that we ought to back off from pushing for the development of more comprehensive centers. But NCI should become more aggressive in helping those centers that pass muster to become established. We can't afford to let the Centers Program fail." One requirement is for "more adequate staff" in the program at NCI.

SAFFIOTTI QUITS AS CARCINOGENESIS CHIEF WITH BLAST AT RAUSCHER, PETERS

Umberto Saffiotti, director of NCI's Carcinogenesis Program, has resigned with a blast at NCI Director Frank Rauscher and Div. of Cancer Cause & Prevention Director James Peters for "lack of support . . . and management decisions in which I have not shared nor can I support."

Saffiotti is leaving only his position as associate director for carcinogenesis in DCCP and will remain as chief of the Experimental Pathology Branch in the Carcinogenesis Program.

Saffiotti listed a series of disagreements with Rauscher and Peters, in none of which did he prevail, as the basis for his decision. He took the unusual step of compiling his complaints in a 13-page memorandum and sent it to members of Congress and the press.

"The situation has been building up for some time," Saffiotti told ***The Cancer Letter.*** He listed as his complaints:

- Lack of personnel support. Of the 79 new positions NCI obtained this year through congressional mandate, Saffiotti received only three. "Management of a program of this complexity and magnitude is untenable," he said. "Three is inadequate even for minimum maintenance." He has asked for 20-25 additional positions each of the last three years, getting only the three this year.
- "Inadequate role of senior scientific staff in program direction at the institute level."
- The decision by Rauscher, with Peters' support, to establish a National Clearinghouse on Carcinogenesis, which will be run out of Peters' office with no responsibility to Saffiotti. "That was done without my involvement or participation," Saffiotti said. He contends that the Clearinghouse, which will include non-scientific representation, will further remove scientists from the decision-making process.
- The decision by Rauscher and Peters to split the Carcinogenesis Program, moving the Bioassay Branch

out of Saffiotti's jurisdiction and directly under Peters' control. Included in the move will be in vitro carcinogenesis research. Saffiotti would be left with the Biology, Metabolism & Toxicity, Chemistry, Pathology and Lung Cancer Branches. Rauscher asked him to stay on in that role, as associate director for carcinogenesis research, "but I couldn't agree with the policy of splitting up the program. It is difficult to participate in an organized activity that you disagree with."

• "Removal of key people without discussing it with me." Saffiotti mentioned the transfer of James Sontag and Herman Kraybill to Peters' office as examples.

"I have built up, managed and directed the Carcinogenesis Program for eight years, with a strong scientific staff. My philosophy has been that scientists, assisted by competent managers, can effectively manage a large scientific program, instead of managers directing it, assisted by scientists."

Rauscher told ***The Cancer Letter*** that establishing the Clearinghouse and moving the bioassay work to Peters' office was needed "to give the program more visability, muscle and stability. I have the highest regard for Dr. Saffiotti, but I felt we had to make these changes. I'm sorry he disagrees with them. I'm pleased that he's going to stay on as chief of the Pathology Branch, and I will continue to rely on him as one of our senior scientists."

Peters said that "it seemed to us the bioassay screening program, as good as it is, and it is the best in the world, could still be improved, with added emphasis and visibility. I have no quarrel with Umberto. He couldn't accept our philosophy. Our only difference is a philosophical one."

Saffiotti has been heading for a showdown with NCI management since last November, when the National Cancer Advisory Board Subcommittee on Carcinogenesis declined to adopt his guidelines in the development of its "Criteria for Determining the Carcinogenicity of Chemicals."

It also was obvious Saffiotti was opposed to, if not offended by, the decision to establish the Clearinghouse. That was a decision undertaken by Rauscher specifically to bring under his control the process of determining when a potential carcinogen should be considered a threat to public health, when any announcements should be made, when regulatory agencies should be alerted, etc. This impinged on territory previously occupied by Saffiotti and in fact was designed to clip his wings. This followed the release by Saffiotti of technical reports which pointed to trichloroethylene as a carcinogen and caused processors to hastily substitute a new and untested chemical which could be even more hazardous. The Clearinghouse, with representatives of labor, industry, consumers and the regulatory agencies, will be charged with assessing risk vs. benefit, exposure factors and probable substitutes, as well as scientific data.

Although Rauscher and Peters had nothing but kind words for Saffiotti's ability as a scientist and for building up the Carcinogenesis Program, it had become obvious they were less than impressed with his management of some aspects of it in recent months. Rauscher and Peters have taken a lot of heat from environmentalists who claim NCI is sitting on the results of tests of 200 or more chemicals. Bioassays of those chemicals, started 3½ years ago, have been completed but have been awaiting analysis and compilation into publishable form.

Saffiotti points to that as a result of the failure to give him adequate numbers of people to do the job. But others say that he knew when those chemicals went into the pipeline that he would need the resources to handle them when they came out, and also knew that the White House was determined to restrict NCI hiring. "He could have planned for it and done some reprogramming," one NCI staff member said.

NCI ADVISORY GROUP, OTHER CANCER MEETINGS SCHEDULED IN MAY, JUNE

12th Annual Meeting of the American Assn. of Clinical Oncologists—May 4-5, Toronto.

Cancer Control & Rehabilitation Advisory Committee Subcommittee on Prevention—May 5, Blair Bldg Room 616, 9 a.m.—3 p.m., open.

67th Annual Meeting of the American Assn. for Cancer Research—May 6-8, Toronto.

11th Canadian Cancer Research Conference—May 6-8, Toronto.

58th Annual Meeting of the American Radium Society—May 9-11, Vancouver.

Postgraduate Course on Immunovirology of Cancer—May 10-22, Lyon, France.

Virus Cancer Program Scientific Review Committee B—May 10-11, NIH Bldg 37 Room 1B04, open May 10, 9—9:30 a.m.

Cancer—Towards A Solution—May 11, London, sponsored by the Marie Curie Memorial Foundation.

Ist Meeting of the European Nuclear Medicine Society—May 12-15, Lausanne, Switzerland.

Cancer Control & Rehabilitation Advisory Committee Subcommittee on Reimbursement—May 12, Blair Bldg Room 616, 9 a.m.—3 p.m., open.

President's Cancer Panel—May 13, NIH Bldg 31 Room 7, 9:30 a.m., open.

Seminar on Malignant Lymphomas—Recent Trends in Classification and Therapy—May 13, Roswell Park Continuing Education in Oncology.

Combined Modality Committee—May 14, NIH Bldg 31 Room 7, open 9—9:30 a.m.

11th Tutorial on Clinical Cytology—May 16-22, Univ. of Chicago.

Yale Neuro-Oncology Course— May 17-18, New Haven.

National Cancer Advisory Board Subcommittee on Organ Site Programs—May 17-18, NIH Bldg 31 Room 8, open May 17, 9 a.m.—4 p.m., May 18, 9 a.m.—adjournment.

Third National Cancer Survey Utilization Advisory Committee—May 18, Landow Bldg-Room C418, open 8:30—adjournment.

Breast Cancer Task Force—May 19, Bethesda Holiday Inn, open 8:30—adjournment.

Breast Cancer Diagnosis Committee—May 20, NIH Bldg 31 Room 7, open 8:30—10:30 a.m.

Breast Cancer Epidemiology Committee—May 20, NIH Bldg 31 Room 9, open 10:30 a.m.—adjournment.

Breast Cancer Experimental Biology Committee—May 20, Landow Bldg Room C418, open 8:30 a.m.—12:30 p.m.

Breast Cancer Treatment Committee—May 20, NIH Bldg 31 Room 4, open 10:30 a.m.—adjournment.

Cancer Control Community Activities Review Committee—May 20-21, NIH Bldg 1 Wilson Hall, open May 20, 8:30 a.m.—4 p.m., May 21, 8:30 a.m.—1 p.m., 2 p.m.—adjournment.

Cancer Control Intervention Programs Review Committee—May 20-21, NIH Bldg 31 Room 10, open May 20, 8:30 a.m.—4 p.m., May 21, 8:30 a.m.—1 p.m., 2 p.m.—adjournment.

Cancer Control Supportive Services Review Committee—May 20, NIH Bldg 31 Room 5, open 9 a.m.—1 p.m.

Cancer Control & Rehabilitation Advisory Committee—May 25-26, NIH Bldg 31 Room 6, 9 a.m., open.

Nursing Seminary, Horizons in Cancer Care: Colon & Rectal Cancer—May 26, American Cancer Society Los Angeles Coastal Cities Unit.

Virus Cancer Program Scientific Review Committees A & B—May 26-28, NIH Bldg 37 Room 1B04, open May 27, 9—9:30 a.m.

National Conference on Radiation Oncology—May 27-29, San Francisco, sponsored by American Cancer Society.

Committee on Cancer Immunotherapy—May 27, NIH Bldg 10 Room 4B14, open 1—1:30 p.m.

National Cancer Advisory Board Subcommittee on Environmental Carcinogenesis—June 2, NIH Bldg 31 Room 6, 9:30 a.m., open.

National Cancer Advisory Board Subcommittee on Centers—June 4, NIH (room and time to be assigned).

President's Cancer Panel—June 9, NIH Bldg 31 Room 7, 9:30 a.m., open.[

Management of All Stages of Colo-Rectal Carcinoma—June 10, Roswell Park Continuing Education in Oncology.

13th World Congress of Rehabilitation International—June 13-18, Tel Aviv, sessions on laryngectomies and mastectomies to be included.

15th National Medical Symposium—June 20-24, Univ. of Utah, Salt Lake City.

Additional listings for June will be reported in the May 26 issue.

NCAB SUBCOMMITTEE LIKES ORGAN SITE PROGRAMS, EXCEPT FOR SMOKING-HEALTH

The National Cancer Advisory Board's Subcommittee on National Organ Site Programs presented a generally favorable report on the programs but suggested that better coordination is needed for NCI's various lung cancer research activities and said consideration should be given to discontinuing the effort to develop a less hazardous cigarette.

The subcommittee's report to the Board was based on two meetings last year in which presentations were heard from program directors and NCI staff. Reports were made on the National Prostatic and Pancreatic programs and on the Lung Cancer and Breast Cancer task forces. Another meeting is scheduled for May 17 and 18 when reports will be made on the National Large Bowel and Bladder projects and a further report on the Breast Cancer Task Force.

The subcommittee report said that it was "concerned that there appeared to be very little coordination of the lung cancer research activities among the NCI divisions." It said that continued use of the term "Lung Cancer Task Force" gives the impression of an integrated effort which, "although still needed, is no longer extant."

The subcommittee expressed some reservations about the value of the VA lung cancer studies supported by the Div. of Cancer Treatment. And as for the Smoking & Health Program, "Much of the work described appeared unexceptional. There was some expression of sentiment by subcommittee members that perhaps this activity should be stopped, changed or curtailed," the report said.

Other recommendations in the report were:

1. That NCAB approve the following budget ceilings for the current operational years for the organ site projects—Bladder, $4.62 million; large bowel, $4.83 million; pancreatic, $2.5 million; prostatic, $4.4 million.

2. That the priority score cut off, below which approved applications in the organ site projects are not funded, be set closer to the cut off for regular grants. The subcommittee recognizes the special needs of these projects and further recommends that the Board permit flexibility of the cut off for specific projects for which acceptable programmatic justification is documented.

3. That the Board charge NCI staff to convey its concern about filling the position of assistant scientific director for the National Pancreatic Cancer Project to the project director.

4. The subcommittee recognizes that although a large fraction of the contract funds expended by NCI are essentially for extramural research rather than direct operations in support of intramural research, there is no provision for regular NCAB review of such contract awards. Members of the subcommittee believe that review of these contract activities is mandated by the National Cancer Act. It is therefore recommended that NCAB seek means to keep itself regularly informed of these activities in order ti discharge its responsibility under the Act.

The subcommittee concerned itself primarily with the merit of research supported by the programs, review, planning, dissemination of project information, administration, and the budget. Excerpts from the report follow:

PROSTATIC CANCER PROJECT

Merit of Supported Research. Presentations of work in progress were made by three grantees of the project and by Gerald Murphy, the project director. Morris Pollard of Notre Dame discussed his animal model of prostatic cancer derived from elderly, germ-free rats, including some immunologic and chemotherapeutic research with the model. Charles Moncure, Virginia Commonwealth Univ., discussed his search for specific isoenzymes of acid phosphatase which might be of diagnostic value. Joseph D. Schmidt, Univ. of Iowa Hospital, reported on one chemotherapeutic protocol in which patient accrual has been completed. Murphy reported, for Malcolm Bagshaw of Stanford Univ., on a radiotherapy trial

involving radiation extended to outlying lymph nodes in appropriate cases.

Review of Applications. There are at least three (usually four) written reviews on each application. These reviews are then discussed by the full working cadre before action is recommended. Reviews are obtained from acknowledged experts in the subject matter of the application. Subcommittee members who have observed the working cadre at review meetings expressed satisfaction with the reviews conducted. The approval rate for the project is approximately 64%; 86% of approved applications have been funded as of Sept. 1, 1975. Approximately 55% of applications submitted were funded.

Planning. The working cadre annually reviews recommendations from three working groups (etiology/prevention; diagnostis/detection; treatment). The working groups meet each year and develop recommendations based on research progress observed in the active grants and information from all other available sources. The working cadre reassesses and revises the approved national plan of the project in conformity with these recommendations from the working groups.

Dissemination of Project Information. Repeated announcements soliciting research proposals have appeared in 17 journals during the past year. The treatment working group has distributed brochures and copies of the project's newsletter, and has placed a portable exhibit at 10 regional urological association meetings. Headquarters staff, working cadre members, and grantees have made presentations about the project at numerous meetings. One hundred and seventy-one inquiries were received in FY '75 from potential applicants.

Administration. The project directorate is aware of the need for integration and coordination of its activities with NCI as well as within the project itself. This is partially accomplished by representation on the working cadre of an NCI staff member from the Div. of Cancer Treatment and of two others from the Div. of Cancer Cause & Prevention. Staff of the National Organ Site Programs Branch is making formal contracts with all interested units within NCI to exchange information obtained through the Analysis and Evaluation Branch, DCRRC, about active grants supported through the regular grant mechanism at NCI.

Budget. The project has commitments for continuation and renewal grants of $2.5 million (direct costs) in FY '76. Based on these commitments and on anticipated grant applications, the project requested a ceiling of $4.6 million (including indirect costs) against which committed funding, the headquarters grant, and newly approved grants may be charged.

Subcommittee Evaluation: Based on materials submitted prior to the meeting and on oral presentations made during the meeting, the subcommittee believes the National Plostatic Cancer Project is supporting meritorious research; reviewing applications rigorously, thoroughly, and fairly; planning well; and vigorously informing the biomedical community of its needs and interests. In light of the activities described above, the administration of this project appears to be in very able hands.

LUNG CANCER TASK FORCE

In FY 1975, Lung Cancer Task Force funds were distributed among three NCI divisions as follows: DCBD, $1 million; DCCP, $4.13 million; and DCT, $750,000. Oversight of the programs and allocation of funds among the divisions is done by the executive committee of NCI.

The DCCP portion of the LCTF presentations was described by James Peters, division director, who pointed out that the term "task force" is no longer a valid descriptor of the lung cancer research efforts at NCI. In effect, there are independent programs in three NCI divisions with informal coordination. Peters also noted that there are approximately $3 million worth of contracts in his division devoted to basic research on lung cancer. Eventually much of this work will be supported under the CREG mechanism. Peters indicated that, in his view, the informal coordination was adequate to prevent undesirable overlap between the divisions, that the existence of the program was widely known, and that there are no major gaps in the research effort.

Smoking and Health Program. Tom Owens, assistant director of the Smoking & Health Program, described the activities of that program. The major effort is devoted to developing a less hazardous cigarette. Currently the program operates exclusively by contracts, but plans are being made to support the more basic aspects of the program through CREG grants.

Approximately 1/8 (or $1 million) of the program's funds are drawn from the lung cancer task force budget line item. These were 19 contracts and interagency agreements active in 1975. The program director and assistant director are the only NCI professional staff assigned; major logistic activities are carried out by a prime contractor.

Three advisory groups are utilized. The Tobacco Working Group provides advice on overall program strategy, objectives, and major lines of investigation; the Smoking & Health Review Board functions to assess research needs and relevance, and relative priorities for proposed projects; the third advisory group consists of a large panel whose members review individual proposals for scientific and technical merit. The program director selects reviewers from the panel of experts as required. Evaluations are ordinarily conducted by mail. Special program advisory groups have also been convened for specific purposes.

The scientific work supported under the program varies from attempts to characterize components of cigarette smoke and improve bioassay techniques for

measuring its carcinogenic properties, to effects of smoking in animal models.

Subcommittee Evaluation: Much of the work described appeared unexceptional. There was some expression of sentiment by subcommittee members that perhaps this activity should be stopped, changed, or curtailed.

Lung Cancer Branch. Michael Sporn, chief, Lung Cancer Branch, described the activities of his branch and introduced representative contractors who described their current research efforts. Sporn said that the $3.5 million derived from the Lung Cancer Task Force budget supports 19 contracts

The major thrust of the Lung Cancer Branch and the Lung Cancer Segment contracts is the interdiction of the progression from environmentally caused preneoplastic changes to lung cancer. The intramural research activities and the contracts activities are complementary.

Subcommittee Evaluation: The research was considered interesting and useful. The contracting procedures wherein RFPs are generated primarily intramurally but proposals are reviewed by external committees composed predominantly of non-government scientists were thought to be a good model.

Div. of Cancer Treatment. Stephen Carter, deputy director, described its programs related to lung cancer. He noted that the Lung Cancer Treatment Program is interested in supporting more research in multimodal treatment and that single agent chemotherapy is not as useful as originally hoped. Even methotrexate, one of the more efficacious agents for oat cell lung cancer, does not result in significant gains for the patient. He noted that tumor burden reduction by means of radiation or surgery may improve the result obtained with immunotherapy or chemotherapy and is being tested. Other contracts are devoted to studies of lung cancer cell kinetics (animal and clinical), chemotherapeutic trials of combined agents in animals preparatory to human clinical trials, and the formulation, toxicology, and pharmacology of chemotherapeutic drugs. Carter indicated that he looks upon the VA hospital group as a valuable resource because it is well organized and accessible.

Subcomittee Evaluation: The subcommittee indicated reservations about the value of the VA studies.

Div. of Cancer Biology and Diagnosis. Alan Rabson, director of the division, reminded the group that Nathaniel Berlin, his predecessor, had been a prime mover in the use of exfoliative cytological techniques for lung cancer diagnosis. William Pomerance, chief, Diagnosis Branch, described the lung cancer research support activities of his branch. There are four active contracts totaling approximately $2 million, $1 million of which is derived from the lung cancer task force budget item.

Subcommittee Evaluation: Specific discussion of the lung cancer research effort in this division was omitted due to lack of time.

Subcommittee Evaluation, General: The subcommittee was concerned that there appeared to be very little coordination of lung cancer research activities among the divisions at NCI.

The subcommittee was also concerned that the work on a less hazardous cigarette appears to be at a lower than desirable scientific standard. Because of this and because much of the work is not really cancer research, this work is perhaps not appropriate for support by NCI.

Gori said, "Obviously the subcommittee didn't look carefully at our program. They had only a 10-minute presentation. We've presented it to the Board many times, always with a good response. We have results to show. Some of the research is pedestrian. Sometimes you have to do pedestrian work to get practical results. Some of the research is anything but pedestrian." *The rest of the subcommittee's report will appear next week.*

RFPs AVAILABLE

The Viral Oncology Program will make available to interested contractors a request for proposal for the study of combined action of viruses and biological, physical or chemical factors resulting in the transformation of mammalian cells to malignancy. Cofactors in virus associated neoplasia of interest to the Virus Cancer Program include non-oncogenic viruses, other infectious agents, mutagens, radiation, chemical carcinogens and hormones. Studies to identify and resolve the nature of the cocarcinogenic activity expressed by the combined influence of viruses and other factors on cells will be conducted by the contractor. Since multiple awards are anticipated, interested proposers are invited to respond to any of the projects listed below: (Deadline for the associated RFPs is May 14).

RFP NCI-CP-VO-61044-63

Title: *Effect of environmental factors on in vivo endogenous sarcogene expression in primates or rodents*

The following areas are of interest:

A. Isolation of new transforming viruses from tumors arising in animals exposed to one or more of following environmental factors: chemicals, radiation, hormones or non-oncogenic viruses.

B. Development of systems to study the processes involved in generating sarcogene expression in primates or rodents in vivo.

RFP NCI-CP-VO-61041-63

Title: *Influence of interaction between environmental factors*

The contractor is expected to identify one or more intrinsic factors (e.g., mutagens, carcinogens, radiation, hormones, other virus infections which activate endogenous sarcogene expression in murine in vitro cell systems). The contractor is expected to investi-

gate the relationship between activation by environmental factors of the endogenous sarcogene expression and malignant transformation in cell cultures.

RFP NCI-CP-VO-61042-63

Title: *In vitro transformation of mammalian cells resulting from the intracellular interaction of a non-oncogenic virus and chemicals*

The contractor will determine the possibility of malignant cell transformation by interaction of chemicals with cell cultures persistently infected with normally non-oncogenic DNA or RNA viruses.

RFP NCI-CP-VO-61043-63

Title: *In vitro malignant transformation of human and subhuman primate cells by interaction between viruses and chemicals*

The contractor will make use of human and subhuman primate cell culture systems to establish interaction between viruses and chemicals resulting in malignant transformation.

RFP NCI-CP-VO-61045-63

Title: *Development of mammalian cell lines, known to contain endogenous oncogenic virus sequences, which can be utilized in testing mutagenic and carcinogenic effects of environmental factors*

The contractor will conduct investigations in the following:

A. Develop in vitro cell lines from species known to contain integrated oncornavirus sequences.

B. Utilize such cell lines to correlate mutagenic and carcinogenic effects of biological, chemical or physical environmental factors. Mutagenesis may be monitored by in vitro morphological transformation and/or in vivo tumor production in suitable animals.

Contract Specialist: Jacque Labovitz
Cause & Prevention
301-496-6496

RFP NO1-CP-65786-62

Title: *Studies of differential nutritional requirements by host and tumor as the basis for dietary treatment of cancer*

Deadline: *May 12*

The objectives of this project are to determine whether direct nutritional therapy alters the rate of tumor growth and can be used as a treatment modality; whether direct nutritional therapy and concomitant antineoplastic therapy results in synergistic benefits; and how direct nutritional therapy affects the host-tumor response and other associated parameters such as host-immune response.

This project will be a multidisciplinary, cooperative study involving two institutions, coordinated so that data collected will be utilizable in other ongoing experiments and so that future research efforts can be planned in this area. Each research institution will be responsible for conducting the clinical segment under a common protocol. Research will be conducted on cancer patients with malignant brain tumors. During and after the experimental period, patients will be followed and evaluated to assess their response to direct nutritional therapy. In vivo studies using animal models and in vitro studies will also be coordinated to minimize duplication of effort. Proposers will keep the clinical and laboratory aspects of their proposal separate.

In addition to the preliminary clinical protocol and the laboratory protocol for this project, the offeror will document the capabilities, expertise and other relevant information on key individuals and the organization(s) which will conduct the clinical and laboratory research.

Since the clinical aspects of this project will involve cancer patients already undergoing treatment, it is assumed that many expenses associated with the program, such as bed, therapy, patient monitoring, nursing and physician costs, will be funded by other grants, normal salaries or third-party payments. It is expected that approximately three professional person years will be required. Proposers are encouraged to submit their own estimates of effort required.

Contract Specialist: Dorothy Britton
Cause & Prevention
301-496-6361

CONTRACT AWARDS

Title: Search for genetic material and perform oncogenic studies
Contractor: St. Louis Univ., $48,960.

Title: Immunological studies on breast carcinoma
Contractor: Univ. of Texas–M.D. Anderson, $60,783.

Title: Inelastic laser light studies on nucleic acids, nucleoproteins and viruses
Contractor: Michigan Cancer Foundation, $24,976.

Title: Molecular studies of herpes viruses of potential oncogenicity
Contractor: Univ. of North Carolina, $29,900.

SOLE SOURCE NEGOTIATIONS

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

Title: Conduct an immunologic study of RNA (type C) viruses
Contractor: Scripps Clinic & Research Foundation.

The Cancer Letter—*Editor* JERRY D. BOYD

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