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UPTON PROMISES "MINIMAL DISRUPTION" AS RESULT OF CHANGES; CENTERS PROGRAM PROBABLY TO MOVE

NCI Director Arthur Upton assured the institute's grantees and contractors that there will be "minimal disruption" of their work in the Cancer Program as a result of the reorganization he is preparing to implement.

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In Brief

CONSTRUCTION GRANT TRANSFER TO USC APPROVED; ILLINOIS DIRECTOR SAYS NCI PUSHED CONSORTIA

CONTROLLER GENERAL has approved transfer of the $11.9 million construction grant, originally awarded to the Univ. of Southern California/Los Angeles County Comprehensive Cancer Center, to USC. When the county backed out of its agreement to share in the cost of building a new cancer center, USC decided to proceed on its own. NCI's review committee and the National Cancer Advisory Board approved the revised plan, but the award was held up when the Office of Management & Budget decided there was no precedent for transferring a grant from one institution to another. Controller General Elmer Staats ruled that, in this case at least, it was legal. . . . **JAN STEINER**, director of the Illinois Cancer Council, objected to the statement in *The Cancer Letter*, Dec. 9, that NCI had been reluctant to recognize consortia as comprehensive cancer centers. The Illinois Cancer Council is the entity through which the Univ. of Chicago, Northwestern Univ. and Rush-Presbyterian-St. Luke's Hospital are recognized as a comprehensive cancer center. On the contrary, Steiner said, NCI executives actively encouraged development of the consortium despite his warning that the NCAB's 10 characteristics for comprehensive centers were not appropriate for that type of an organization. NCI staff and some centers program reviewers recently have been critical of consortia, and Steiner agrees that some of the criticism is valid. "A consortium is difficult to build. It's slow, but if we're given time, we can build it. We could make a powerful case that this type of center is closer to the intent of Congress than the single institution centers". . . . **JONATHAN RHOADS**, NCAB chairman, explaining why NCI might be justified in considering center support grants on a basis different than research grants: "There may already be a great deal of investment built up at an institution. Then it comes in with a not so good application for renewal. Are we prepared to run them out, see them abandon it? Or have some system by which we can tell them they need to improve in a couple of years or lose out." When it was pointed out that losing its core grant might not result in a center being abandoned, considering the possibility it would be continued with other funds, Rhoads said, "That's right. Perhaps only the director would have to apply for unemployment benefits."

TERRY MAY HEAD CENTERS PROGRAM, CONTINUE TEMPORARILY WITH PRESENT JOB

(Continued from page 1)

The reorganization will transfer grants from the Div. of Cancer Research Resources & Centers to the program divisions—Cause & Prevention, Control & Rehabilitation, Biology & Diagnosis, and Treatment. For the first time at NCI, the program directors will have available to them both contract and traditional grant mechanisms to support extramural research.

(Control & Rehabilitation has had a limited grant program to fund some rehabilitation research and control demonstrations, and had been planning to increase the percentage of its funds going into grants. All divisions have the use of Cancer Research Emphasis Grants, which defined an area for which applications were solicited and permitted some degree of investigator initiative in developing a research proposal. CREGs and DCCR grants totaled only a few million dollars; the traditional and program project grants will receive about $235 million in the current fiscal year.)

The reorganization probably will include moving the Cancer Centers Program out of DCRRC. At the moment, Upton told ***The Cancer Letter,*** he has not locked himself in on where it will go, but it probably will be into his office, at least temporarily.

William Terry, who heads the Immunology Program in the Div. of Cancer Biology & Diagnosis, "is being considered" for the position of associate director for the Cancer Centers Program, Upton said. Terry would continue running the Immunology Program for the present. If he remained permanently with centers, he probably would have to give up immunology.

Upton said the changeover probably would take years to complete. "We're going about this deliberately and carefully. It is not a set of changes that needs to be disruptive. I don't want our grantees and contractors to think that Upton is taking apart a machine on the garage floor and scattering the parts around without knowing how he's going to put it back together."

Upton was quoted (***The Cancer Letter,*** Jan. 13) as saying that as a rule, basic research would be supported through grants, other than basic research through contracts. That statement was taken from a memo circulated to some staff members, was not written by Upton "and does not reflect my views," he said.

"Restrictions will not be on grants; restrictions will be on contracts," Upton said. "Deserving grants will be paid, for basic and applied research. I would hope that clinical research grants will be expanded."

Upton left little doubt that he intends to push hard to redirect a major portion of contract funds into grants. Asked if, when the reorganization is implemented, a division director or program director would have the authority to bypass a grant application with a high priority score in favor of one with lower priority which he feels better fits into his program, Upton said, "Definitely not. We are going to allocate an increased budget for grants and pay off on merit. It will provide a larger bank account against which grants can compete."

Nor will a division or program director be permitted to fund a contract at the expense of a high priority grant, even if the contract is perceived as being more important to the program. Any decisions to use contracts instead of grants "will have to be defended to the hilt," Upton said.

What about the prospect that a high priority (as rated by peer review) grant application might duplicate work being done through an existing contract? "Duplicative contracts will be phased out," Upton said. "And it is incumbent on the divisions not to let contracts that are duplicative."

Contracts will not disappear from NCI, however. "There are eminently valid uses of the contract," Upton said. "I think we will always see a sizeable contract program at NCI. Some superb science is being done under contracts."

The reorganization tackles head on the old controversy of grants vs. contracts, investigator-initiated vs. targeted research. Both sides appear to have won something. It will substantially increase the amount of money available for investigator-initiated research, but the program directors, for the first time, will have something to say about how all that grant money is spent.

How much influence the program people will have over the process probably will be the basis for another continuing controversy,

Another factor that may tend to limit the influence of division and program directors is the other side of the reorganization—the removal of all peer review functions, including contract review committees, their executive secretaries, other staff people involved in the peer review process from the program divisions to DCRRC.

Upton said DCRRC will have "total responsibility" for establishing policies under which both grants and contracts will be used. For the first time, this will give DCRRC considerable influence over the contract process.

Following is the statement Upton sent to NCI staff explaining the philosophy of the reorganization.

"This is to inform you of planned improvements in the organization of the National Cancer Institute designed to:

"—Bring about more effective integration of scientific and training activities of NCI.

"—Bring the organization of NCI more nearly into conformity with the organizational patterns of the other major NIH institutes.

"—Bring NCI into closer compliance with HEW requirements for separation of program management

from grant and contract administration, and from the peer review of grants and contracts.

"—Give grant applications in all program areas an increased opportunity to compete on merit in the total dollar pool.

"The intended reorganization is to encompass three major changes:

"Grant portfolios, and responsibility for their program management, will be transferred from the Div. of Cancer Research Resources & Centers to other NCI divisions that manage similar or related programs; in most cases, relationships of grantees will continue with the same members of the NCI as at present.

"Responsibility for all peer review activities, for both grants and contracts, will be transferred from other divisions to the DCRRC.

"Responsibility for all peer review activities, for both grants and contracts, will be transferred from other divisions to the DCRRC.

"DCRRC, which will continue to handle the administrative management of grants, will bear total responsibility for establishing policies under which NCI grants and contracts are to be used.

"As with any major organizational change, we expect a period of transition and adjustment during which we will seek to keep disruption to a minimum. The steps to carry out the intended changes will be worked out during the coming weeks by my staff in close cooperation with the divisions. The actual implementation of the reorganization (i.e., personnel actions, space moves, budget transfers, etc.) will take some time and will be accomplished so as to cause no undue hardship to the individuals concerned."

MOVEMENT TO BOYCOTT CANCER CONGRESS GAINS SOME SUPPORT FROM ACS PROFS

The movement by a group of U.S. scientists to discourage their colleagues from attending the XIIth International Cancer Congress in Buenos Aires Oct. 5-11 made some progress recently when American Cancer Society Research Professors agreed as individuals that they would decline an opportunity to go.

But the ACS Professors also agreed that they would not take any formal action as a group, leaving it up to each one to decide individually.

The movement is based on alleged terrorist activities against scientists and other intellectuals by or with the consent of the Argentine government. A letter to *Science* magazine signed by David Baltimore, MIT; Emil Frei III, Sidney Farber; Henry Kaplan, Stanford; Henry Rappaport, City of Hope; and Howard Temin, McArdle Lab, charged that "flagrant abrogation of human rights" exists in Argentina. "Recent reports leave little doubt that scientists, physicians, professors, journalists, intellectuals, and other citizens have been arrested, imprisoned without benefit of habeas corpus, often tortured, and sometimes executed without trial. We cannot in good conscience condone such actions, nor can we participate in an International Cancer Congresss however worthy its cause if it is held in Argentina," the letter said.

The letter called on the International Union Against Cancer (UICC), the sponsoring organization, to move the congress to another country.

Petitions supporting this stand are being circulated, and one at NIH reportedly has more than 100 signatures. Copies are available from Rappaport, City of Hope, 1500 E. Duarte Rd., Duarte, Calif. 91010.

NCI Director Arthur Upton last fall declined to withdraw the institute's support from the Congress on the basis that the U.S. government maintained diplomatic relations with Argentina and had taken no official action in recognition of the charges. NCI, Upton said, would leave foreign policy to the State Dept.

UICC has not responded to the movement, and officers of the organization have refused to comment for the record.

Some U.S. scientists who do not agree with the proposed boycott feel that the proponents are not being fair in singling out Argentina for condemnation over the human rights issue. Several of the proponents recently spent several weeks in the People's Republic of China, and others have actively engaged in support of the USSR-US agreement, including travel to the Soviet Union.

"Argentina is small potatoes compared with what has gone on in Russia and China," one scientist said. "They say that by attending the Argentina meeting we would be giving tacit approval to repression there. Well, what about their trips to Russia, where scientists, artists and other intellectuals are digging right now in the Siberian salt mines? And maybe they are lucky compared with others."

Responses to that argument included: 1. The Congress is scheduled for Argentina; if it were being held in the Soviet Union or China, a similar boycott probably would be mounted. 2. Both the Soviets and Chinese hold scientists in high regard and do not have systematic campaigns of terror directed against them, while this appears to be the case in Argentina. 3. The boycott, either by forcing a change of venue or by crippling the Congress, possibly could have dramatic, visible, beneficial effect on observance of human rights in Argentina and other countries.

Anti-boycott people point out that UICC is a nongovernmental, nonpolitical institution and should not be involved in a political controversy. Some feel that if there is any gain to be had from political involvement, a better way would be to attend the Congress, develop a strong statement there directed to the Argentine government, demand that allegedly imprisoned scientists be presented for interview, do anything else that might convey a feeling of support from scientists to their oppressed colleagues.

UICC officers feel that it is too late to change the site of the Congress now anyway. A substantial amount of money has been invested, hotel and airline reservations made, and the program firmed up.

Each day of the Congress will start with a special lecture—environment and cancer, immunology and cancer, subclinical cancer concept and management, modern cancer therapy concepts, and viral oncologenesis.

The special lectures will be followed by the symposia, 26 in all spread out over the five morning and afternoon sessions. Symposia, chairmen and vice chairmen are:

Viral oncogenesis—Fred Rapp, USA, K. Munk, Germany; Chemical oncogenesis and mutagenesis—N.P. Napalkov, USSR, T. Sugimura, Japan; Physical oncogenesis—Arthur Upton, USA, J. Mayo, Argentina; Cell biology and cancer—M. Rieber, Venezuela, E.S. Lustig, Argentina; Immunity and cancer—N. Trainin, Israel, R.W. Baldwin, UK; Hormones and cancer—P.M. Gullino, USA, E. Baulieu, France.

Cancer education—Charles Sherman, USA, F. de Amesti, Chile; Progress in radiobiology in cancer—G.W. Barendsen, Netherlands, L. Révész, Sweden; Progress in clinical radiotherapy in cancer—M. Gaitán Yanguas, Colombia, L. Holsti, Finland; Physical methods in cancer diagnosis—Arthur Holleb, USA, Philip Strax, USA; Biological markers in cancer—W.W. Franke, Germany, Enrico Mihich, USA; Bioassay systems for carcinogenesis—R. Montesano, IARC, V.S. Turusov, USSR.

Cell membrane and cancer—M.M. Burger, Switzerland, Y.M. Vasiliev, USSR; Cancer epidemiology—Gregory O'Conor, USA, N. Munoz, IARC; Seroepidemiology and human cancer—G.B. de The', IARC, K. Nishioka, Japan; Biological changes in human cancer—T.C. Hall, Canada, D.L. Perazzo, Argentina; Interaction between genetic and environmental factors in human cancer—K. Shanmugaratnam, Singapore; Biological basis of cancer chemotherapy—S. Eckhardt, Hungary, D.E. Bergsagel, Canada; Cancer immunotherapy—D. Pressman, USA, L. Schwarzenberg, France.

Cancer campaign—F.J. Wilcox, USA; Psychological impact of cancer—J. Schavelzon, Argentina, James Holland, USA; Data processing in cancer—M. Wolff-Terroine, France; G. Wagner, Germany; Comparative leukemia—L. Chieco-Bianchi, Italy, C.D. Pasqualini, Argentina; Modern and prospective trends in cancer surgery—I. Elsebai, Egypt, N. Mourali, Tunisia; Development of new antitumor agents—A. Di Marco, Italy, N. Brock, Germany; Occupational cancer—Irving Selikoff, USA, E. Hecker, Germany.

There will be 15 multidisciplinary panels running concurrently with the symposia, devoted to the most common cancers. UICC said "they may be considered short courses on the principal cancer sites, and the approach will be a horizontal one to cover both the biological and clinical aspects of each cancer under the following general headings—etiology, epidemiology, pathology, earlier diagnosis, education, experimental research, treatment and end results."

The panels and chairmen are:

Leukemia—G. Mathé, France; Non-Hodgkin lymphoma—K. Musshof, Germany; Childhood malignant tumors (excluding bone tumors and leukemia)—O. Schweisguth, France; Melanoma—U. Veronesi, Italy; Breast cancer—J.L. Hayward, UK; Lung cancer—S. Ishikawa, Japan; Colorectal cancer—F. Gentil, Brazil.

Uterine cancer—V. Marcial, Puerto Rico; Bone and soft-tissue tumors—N.N. Trapeznikov, USSR; Oral mucosa and pharyngeal cancer—Alfred Kitcham, USA; Pancreatic and liver tumors—Isadore Cohn, USA; Gastric cancer—N.N. Blokhin, USSR; Bladder and prostate cancer—W. Whitmore, USA; Ovarian cancer—A.C. Junqueira, Brazil; Esophageal cancer—D.J. Jussawalla, India.

R.W. Baldwin, United Kingdom, will present the UICC Memorial Lecture on "Immunotherapy of Cancer: Developing Concepts and Clinical Progress."

Workshops will replace the conventional sessions for the reading of proffered papers. An ad hoc committee will review papers and group together between 15 and 20 dealing with the same subject which will then be passed to the appropriate workshop chairman. The chairman will examine these papers, and at the workshop present a summary comment on them. Each author will have five minutes to present additional information about his work, to be followed by discussion. Abstracts will be published of all accepted papers. It is estimated there will be 40-50 workshops divided into three-four hours duration. The deadline for receipt of papers is Jan. 31.

A system of information meetings has been devised with the objective of establishing direct, active and personal communication between young scientists and renowned experts in various fields. Approximately 40 meetings of this type will be organized.

Time has been set aside for impromptu meetings.

Scientific and technological exhibitions are planned. "Those who have registered as active members will have the opportunity of displaying and explaining their work and experience or those of their institutes in the fields of experimental and clinical research," UICC said.

"The National Organizing Committee has been particularly concerned that the Congress should provide a showcase for the latest technological advances in the field of oncology. This will be the first exhibition of its type in Latin America and will include equipment for the detection, diagnosis and treatment of cancer; optical instruments and computers; medical, surgical and laboratory supplies; modern prostheses and other material for cancer-patient rehabilitation; literature and audiovisual material for professional and public education; and

the contribution of the chemical and pharmaceutical industries to cancer control."

Registration and other information may be obtained from the General Secretariat, XIIth International Cancer Congress, Casilla de Correo No. 397–Correo Central, 1000 Buenos Aires, Argentina.

CLEARINGHOUSE SHOULD BE MODIFIED TO ADVISORY COMMITTEE, PITOT SAYS

Henry Pitot, director of McArdle Laboratory at the Univ. of Wisconsin and a member of the Clearinghouse on Environmental Carcinogens, agreed with Clearinghouse executive secretary James Sontag that the role of the body should be limited to that of an advisory committee.

Pitot, who is also chairman of the National Cancer Advisory Board's Subcommittee on Environmental Carcinogenesis, said in a letter to NCI Director Arthur Upton that the Clearinghouse work essentially should be in data evaluation and that it should not consider risk assessment to humans as one of its objectives.

Excerpts from Pitot's letter:

"I have been a member of the Data Evaluation Subcommittee since the beginning of the Clearinghouse and have been impressed with the usual division of opinions between the scientific and nonscientific members of the group. Dr. Sontag singled out this subcommittee of the Clearinghouse as one in which many divergent opinions have arisen. One cannot meaningfully evaluate data without the scientific competence to understand the data presented. On the other hand, as Dr. Sontag has pointed out, representatives from a variety of 'communities' can have meaningful input into experimental design and chemical selection. Thus there are parts of the Clearinghouse where appropriate representatives of segments of society can make substantial contributions.

"Finally I agree with Dr. Sontag that the question of risk assessment to the human being should not be one of the Clearinghouse objectives. I believe that you stated this as well. I would like to suggest that for this purpose a group of scientists and nonscientists, epidemiologists and industrialists, statisticians and consumers, etc. be put together under the auspices of the NCI, EPA, FDA and any other component of the federal government which is involved with human risk of carcinogenic compounds. It is this group which should utilize the data generated by the Institute with the advice of the Clearinghouse and all other information from other agencies to determine the risks to the human with reference to exposure, dose, use of the material, etc., in the face of the benefits of the material under study to our society.

"I would propose that the role of the Clearinghouse be modified to that of an advisory committee to the NCI and the director in the bioassay program and related areas. This would essentially be in the area of data evaluation with ad hoc assistance in chemical selection and experimental design. In this way the Clearinghouse could be a smaller group. As suggested by Dr. Sontag, the group should be primarily scientifically based with some ad hoc input to design and selection by public individuals, especially from industry and consumer groups. Furthermore, the data evaluation should be based on not only the bioassay report, but all available literature. If these reports are to be truly peer reviewed in the sense of a scientific publication, then they certainly should be required to have bibliographies. No bioassay is done in a vacuum and the significance and importance of published scientific data should be included in the final scientific evaluation of any compound for later consideration of human risk assessment. It is in this latter vein that the Clearinghouse can be extremely helpful to the bioassay program and in many respects 'keep it on its toes.'

"I do not feel that once the backlog is cleaned up that there will be nothing else for the Clearinghouse to do. It is not mandatory that the Clearinghouse meet six times a year or more. New compounds will be coming under test all the time, and more deliberate consideration of the data generated by these compounds should make future evaluations much more meaningful than the present rapid attempt to evaluate more than 200 compounds within a very short period of time.

"In essence then I do not feel that it is time to dissolve the Clearinghouse. Furthermore, with the present administration, if the Clearinghouse were dissolved it might be extremely difficult to appoint another advisory group having some of the present functions of the Clearinghouse. Thus I feel that a much better approach would be to modify the Clearinghouse, perhaps in some of the ways that Dr. Sontag and I'm sure many others have suggested as well as those noted in this letter. If this required a change in the objectives and charge to the Clearinghouse this should be possible with a minimum of difficulty by yourself, perhaps in consultation with the Subcommittee on Environmental Carcinogenesis of the Board or others."

CLEARINGHOUSE SUBGROUP AGREES THAT FIVE TESTED COMPOUNDS ARE CARCINOGENS

The Clearinghouse Data Evaluation/Risk Assessment Subgroup, reviewing the Carcinogenesis Testing Program's reports on 13 compounds, agreed with the Program's conclusions that five were carcinogenic, seven were not although one of the seven might be a tumor promoter, and one was possibly carcinogenic.

Those found to be carcinogenic:

Lasiocarpine–A toxic plant alkaloid, it induced angiosarcomas in both sexes of treated rats. Although the report indicated it also caused granulocytic leukemia in the treated females, subgroup member Michael Shimkin pointed out that the incidence was

approximately the same as observed in female control animals in another study.

Tetrachlorvinphos—An organophosphate insecticide, it induced neoplastic changes in the livers of the treated mice. Subgroup member George Roush said that if the diagnoses of the liver lesions are accepted as given in the report, the incidence of hepatocellular carcinomas was dose related. Roush said he had difficulty in evaluating the type of lesions found in the increased incidence of cortical adenomas of the adrenal in treated female rats. He said the adenomas were statistically significant when compared with the historical control animals. He was skeptical of the significance of the dose related trend in thyroid C-cell adenomas in treated female rats, noting that thyroid proliferative lesions were found in almost all of the rats.

Program director Richard Griesemer said that the mouse liver lesions were reexamined and the diagnoses of hepatocellular carcinomas confirmed. He also said the staff was confident that the thyroid lesions were treatment related.

M.B. Slombka, Shell Oil Co., said that Shell consultant pathologists had reviewed the mouse liver lesions in a study conducted by the company and found no increase in the incidence of hepatocellular carcinomas in the treated animals. He added that at the same time the NCI tetrachlorvinphos study was under way, dieldrin and malathion were being tested in the same room, suggesting that crosscontamination may have resulted in the increase of hepatocellular carcinomas.

Trifluralin—This is an agricultural pesticide. Subgroup member John Weisburger said that during the manufacture of trifluralin, dipropylnitrosamine (DPNA) was formed and was contained in the technical grade material as a byproduct. DPNA has been shown to be carcinogenic in both rats and mice. Weisburger said that hepatocellular carcinomas in female mice was the only increased tumor incidence found amoung the trifluralin treated animals. Because the tested material contained DPNA, Weisburger said it was not possible to interpret the results in terms of pure trifluralin. He remarked that the tested material was the produce of commerce.

Griesemer said that in addition to liver tumors, a statistically significant increase in the incidence of alveolar/bronchiolar adenomas was found. There also was an increased number of squamous cell carcinomas of the stomach in female mice which appeared to be treatment related.

John Emmerson, Eli Lilly, reported that the nitrosamine content had been reduced by 95% in the commercial trifluralin currently marketed, as compared to the one tested by NCI. Shimkin commented that since DPNA is formed during the manufacture of trifluralin, there may be high occupational exposure to the contaminated product.

2-methyl-1-nitroanthroaquinone—An intermediate in the synthesis of dyes, it induced a statistically significant incidence of hepatocellular carcinomas in male rats. In treated mice, there was almost a 100% incidence of hemangiosarcomas in both sexes and at all dose levels. Subgroup member Henry Pitot, the primary reviewer, also pointed out the relatively high incidence of basal cell hyperplasia of the forestomach in treated rats.

Pitot's motion accepting the Program's report included the statement that the compound be regarded as posing a carcinogenic risk to humans. It was approved unanimously.

5-azacytidine—This is a cancer treatment drug. Roush, the primary reviewer, commented that the severe toxicity of the drug resulted in so many deaths that meaningful statistical analyses could not be done on the treated rats or male mice. In female mice, tumors of the hematopoietic system were associated with treatment. Bone marrow atrophy was a significant finding in the treated rats. Roush agreed with the staff's conclusion that 5-azacytidine induced lymphomas and granulocytic leukemias in the treated female mice.

The motion that there was sufficient evidence to conclude that the drug induced hematopoietic neoplasms despite the inadequacies of the study was approved, with only subgroup member Lawrence Garfinkel opposing it.

The compound in the "maybe" category was 3,3'-iminobis-1-propanol dimethane sulfonate (ester) hydrochloride (IPD). This is another drug used in the treatment of cancer. Subgroup member Louise Strong, the primary reviewer, said that the control groups were too small and the dose levels tested were too high. Many of the treated animals died early in the study due to the severe toxicity of IPD.

Strong said there were a number of tumor types seen in the treated animals, including squamous cell carcinomas, that were absent in the controls. The significance of the tumors, however, was confounded by the poor survival of animals and relatively short duration of the study. Despite the shortcomings, Strong said that the staff's conclusion that no clear carcinogenic effects of IPD were demonstrated in either species was not consistent with the findings. She suggested that a more appropriate conclusion would include a statement noting the increased tumor incidence in treated animals, experimental shortcomings, and the need to retest IPD to clearly define its carcinogenic potential.

Strong's motion stated that, because of the inadequate experimental design and conditions of the test, only limited conclusions can be drawn from the bioassay of IPD. However, the high incidence of tumors at the injection site in both species and both sexes and the dose related incidence of lymphomas in treated mice suggested that IPD may be carcinogenic. The motion was passed with Garfinkel in opposition.

Aroclor 1254, a PCB with a wide variety of industrial uses, is the possible tumor promoter. Pitot said that although statistically significant increases in the incidence of tumors was not found in the treated rats, a high incidence of liver hyperplastic nodules was observed in both sexes.

Pitot said that in other studies reported in the literature, after the proliferative stimulus is removed, the hyperplastic nodules regress and disappear. Stimuli of such liver nodules act more like tumor promoters than complete carcinogens, he said. Based on reports in the literature, Pitot concluded that aroclor 1254 could pose a risk to the human population as a tumor promoter. His motion to that effect included the statement that carcinomas of the gastrointestinal tract may be associated with treatment in both males and females. It was passed with Garfinkel opposing and subgroup member Verald Rowe abstaining.

The other compounds found not to be carcinogenic were chlorpropamide, an oral hypoglycemic agent; emetine, a cancer treatment drug; hexachlorophene, formerly used as a local antibiotic until it was shown to cause neurologic toxicity and deaths in babies; anthranilic acid, a metabolite of tryptophan used as a dye intermediate; dieldrin, an insecticide; and methoxychlor, a pesticide.

Contract Awards

EPPLEY CONTRACT RENEWED, PROBLEMS CORRECTED; RECOMPETITION PLANNED

The various investigations apparently have been completed of the NCI contract with Eppley Institute, the long awaited report by the General Accounting Office of its investigation is due momentarily, and NCI has proceeded with its award of a $3.6 million, three year renewal of the contract.

This will be the final sole source renewal of the contract. NCI plans to recompete it when it expires.

Gregory O'Conor, acting director of the Div. of Cancer Cause & Prevention, said that Eppley had corrected the various problems turned up by the investigations "to our satisfaction." These included charges that Eppley had initiated some studies under the contract which had not been specifically approved by NCI; that 50,000 more animals had been produced than were needed; and that proper accounting of investigator time and equipment used in the project had not been made.

A substantial portion of the $25-30 million Eppley has received during the life of the contract paid for facilities that would be difficult if not impossible for the government to reclaim or move. Asked what would happen to those facilities in the recompetition, O'Conor said, "I don't know. I assume this would be a factor in Eppley's favor in the recompetition."

In addition to conducting chemical bioassays for NCI under the contract, Eppley performed a variety of carcinogenesis research tasks.

In another major contract award, NCI renewed for two years its contract with two cooperative groups—Eastern Cooperative Oncology Group and Radiation Therapy Oncology Group—to extend their clinical trials into community hospitals. This was a $1.7 million contract to Frontier Science & Technology Research Foundation, which administers the contracts for the two groups.

The Div. of Cancer Control & Rehabilitation has contracts with six cooperative groups for similar efforts. The other four are awarded directly to the groups.

Completing the award of large contracts last week were $1 million to the International Agency for Research on Cancer in Lyon, France, for evaluation of carcinogenic risk of chemicals to man, by the Div. of Cancer Cause & Prevention; and $629,000 to EG&G/Mason Research Institute for continuation of its carcinogenesis bioassay data support system to the Bioassay Program, also by DCCP.

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 NCI-CB-84242-31

Title: *Immunoprevention of malignant tumors in guinea pig; treatment of putative precursor lesions*

Deadline: *April 3*

Proposals are sought for study of the influence of age on carcinogenesis by dimethylbenganthracene (DMBA) and on immunoprophylaxis by intralesional administration of a BCG vaccine into the pigmented non-malignant lesions which result from DMBA administration.

RFP NCI-CB-94243-31

Title: *Immunoprophylaxis of bovine lymphosarcoma*

Deadline: *April 3*

Proposals are sought for the study of the immunoprophylaxis of bovine lymphosarcoma with a BCG cell wall vaccine. Correlative studies of immonologic status with course of disease are required.

RFP NCI-CB-84244-31

Title: *Immunologic mechanisms of cattle*
Deadline: *April 3*

Proposals are sought for in vitro investigation of the immunologic mechanisms of healthy and diseased cattle, to be carried out in conjunction with an ongoing immunoprophylaxis study of "cancer eye."

RFP NCI-CB-84255-31

Title: *Typing of HLA antigens on human tissue culture cell lines*
Deadline: *March 22*

NCI seeks laboratories to type HLA antigens on the surface of widely used human tumor tissue culture lines. An inhibition method with lymphocyte targets is preferred.

RFP NCI-CB-84256-31

Title: *Evaluation and further development of leukocyte adherence inhibition assay for malignant disease*
Deadline: *March 22*

NCI seeks laboratories to evaluate the clinical usefulness of the LAI test to further refine the test.

RFP NCI-CB-84245-31

Title: *Toxic activity of syngeneic complement against tumor target cells*
Deadline: *April 3*

Proposals are sought for studying the interactions of tumor cell, anti-tumor cell antibody and complement in completely autologous or syngeneic systems.

RFP NCI-CB-84257-31

Title: *Immunohistochemical studies of tumor associated antigens*
Deadline: *March 22*

NCI seeks laboratories to search for cancer-related markers in or on tumor cells by immunohistochemical techniques and to use them for the discrimination of neoplastic cells from normal cells.

RFP NCI-CB-84258-31

Title: *Maintenance of a serum bank for the rapid evaluation of immunodiagnostic tests for cancer*
Deadline: *March 22*

NCI seeks proposals for maintenance of an extensive bank of sera collected from cancer patients (before, during and after therapy) as well as from benign disease patients and normal controls. Extensive storage facilities and data management are required.

RFP NCI-CB-84259-31

Title: *Purification of human tumor associated antigens*
Deadline: *March 22*

NCI seeks laboratories to purify, isolate and identify TAA's for use in immunodiagnostic assays. Experience in protein chemistry and immunology are required.

RFP NCI-CB-84260-31

Title: *Immune assays for enzymes and isozymes in cancer*
Deadline: *March 22*

NCI seeks laboratories experienced in enzyme work to develop immunologic assays using the enzyme (isozyme) as an antigen, and to evaluate their clinical usefulness.

RFP NCI-CB-84261-31

Title: *Studies of organ associated antigens and other markers in human tumors which may be useful for the diagnosis of amlignant diseases*
Deadline: *March 22*

NCI seeks laboratories to perform detailed studies on fetal, differentiation, tissue or hematopoietic cell markers associated with human tumors to determine their relationship to cancer and to evaluate their clinical usefulness.

RFP NCI-CB-84262-31

Title: *Detection and characterization of soluble antigen-antibody complexes in the circulation*
Deadline: *March 22*

NCI seeks laboratories to assay and isolate ag-ab complexes in the circulation of cancer patients, and to isolate, identify and characterize molecular constituents of the complexes.

RFP NCI-CB-84263-31

Title: *Development of direct assay for lymphokines*
Deadline: *March 22*

NCI seeks laboratories to develop more effective methods to assay lymphokines (LK). Assays are sought that are relatively quantitative, rapid, simple and sensitive to detect hypoproduction of LK or production of LK in response to TAA's.

Contracting Officer for above 13 RFPs: Harold Simpson
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301-496-5565

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