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REAGAN SIGNS APPROPRIATIONS BILL, VETOES BIOMEDICAL RESEARCH AUTHORIZATION MEASURE; CAPITOL HILL ANGRY

President Reagan signed the HHS appropriations bill last week after seriously considering vetoing it, thus—for the moment at least—giving NCI a total of $1.183 billion for FY 1985. The prospect

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In Brief

BREAST CANCER DETECTION CONCEPT WAS FOR GRANTS, NOT CONTRACTS; WALLENS GETS FIVE YEARS PROBATION

CONCEPT APPROVED by the Board of Scientific Counselors of NCI's Div. of Cancer Prevention & Control titled, "Increasing the utilization of effective early breast cancer detection technologies" (**The Cancer Letter,** Oct. 12), reported as a contract supported project, will be a grant program. Up to five grants will be awarded, and the Board approved earmarking $1.75 million for the program in the 1986 fiscal year, $2.5 million in 1987 and $2.5 million in 1988. The RFA describing the program has not yet been released. . . . **WILLIAM WALLENS,** the Niagara Falls physician who pleaded guilty to five misdemeanor counts of falsifying data in an NCI supported cooperative group trial in which he participated (**The Cancer Letter,** Aug. 31), was sentenced to five years probation by U.S. District Judge John Elfvin. Elfvin sentenced Wallens to 122 days in federal prison for each of three of the counts, to be served concurrently, and 122 days for each of the other two counts, to be served consecutively, but then suspended the sentences and imposed probation. As part of the plea bargain which reduced the original charges from felonies to misdemeanors, Wallens paid $20,000 to the government to cover costs resulting from the falsification and subsequent investigation. . . . **NATIONAL CANCER** Advisory Board meeting Nov. 26-28, the Board's annual program review, will include reports on: Frederick Cancer Research Facility by Peter Fischinger; Div. of Extramural Activities by Barbara Bynum; Comprehensive Minority Biomedical Program by Lemuel Evans; Div. of Cancer Prevention & Control by Peter Greenwald and Barbara Hulka; SEER data by Earl Pollack; Div. of Cancer Etiology by Richard Adamson and Barry Pierce; Epidemiology by Joseph Fraumeni; American Cancer Society's prospective epidemiological study by Lawrence Garfinkel; Div. of Cancer Biology & Diagnosis by Alan Rabson and Matthew Scharff; Cancer metastases by Lance Liotta; Role of supercomputer by Jacob Maizel; Immunotoxins in cancer therapy by Ira Pastan; Diagnostic imaging by Fred Ruzicka and David Bragg; Chemotherapy by Bruce Chabner; and the Div. of Cancer Treatment by Chabner and Samuel Wells. The Board's Committe for Review of Contracts and Budget of the Office of the Director will meet Nov. 26, 7:30 p.m., in Bldg 31 Rm. 7.

RESCISIONS COULD TRIM NCI BUDGET; DEVITA SAYS CENTERS $4 MILLION SHORT

(Continued from page 1)

remains, however, that the White House may request rescisions in the overall HHS budget which could result in across the board cuts for all agencies within the department, including NCI. The Office of Management & Budget has been making noises about rescisions to help put a dent in the massive federal deficit.

Despite the fact that NCI received an increase of $100 million over the 1984 budget and $86 million more than requested by the President, and that it fell short by only $3 million of the 1984 bypass budget request, "the perception that all is well with the budget is not the case," Director Vincent DeVita said last week at the President's Cancer Panel meeting in Honolulu.

"We will not be able to fund all competing cancer centers at the recommended levels," DeVita said, noting that the center core grant budget will be about $4 million short.

Much of the increase over 1984 will go to meet the congressional mandate that all grants, including center core grants and clinical cooperative group funding, be paid at peer review recommended levels. In the past few years, NCI has cut budgets from recommended levels in order to support more grants. Other increases ordered by Congress include construction, research training and clinical research. The cancer control budget remains essentially flat, which means any new initiatives will have to be supported by terminating existing programs.

President Reagan's action in vetoing the biomedical research authorization bill dismayed members of Congress and their staff who had worked for four years to put together legislation acceptable to both houses, and they thought, to the Administration. The veto did not entirely dismay NCI executives, however. When they got down to reading some of the fine print in the bill, they spotted what they thought were some "clinkers":

*The authorization NCI has had since the National Cancer Act of 1971 was adopted to establish its own peer review committees independent of NIH's Div. of Research Grants was left out. This was inadvertent, according to Capitol Hill staff members, who said there was no intention to nibble away at any of NCI's independent authority.

NCI could still have its own review organization and appoint review committee members, through the general authority of the Public Health Service Act. In practice, that would require cooperation and approval of the NIH director. While most NCI executives felt that such cooperation would be forthcoming, some were concerned that NIH would demand the right to approve committee appointments and add bureaucratic delays as much as six months to the process.

*The budget authorization of $1.345 billion in the bill was $100 million less than is in the FY 1986 bypass budget. NCI right now is working hard to make the case with OMB for the bypass budget, and cancer program advocates outside the federal government will press for the bypass total in Congress. The $1.45 billion asked in the bypass budget is essential in FY 1986 to start getting all the items in place for the drive to meet the Year 2000 goals.

*Some provisions in the authorization bill appeared to take away some of the NCI director's independent authority, requiring him to go through the HHS secretary rather than report directly to the President.

Congressional staff members deny that last point, contending that the bill language retained all of the director's authority to award grants, support cancer centers and construction of research facilities. They admit that the NCI peer review authority was left out but say that it was an unintentional oversight and that it will be included in new authorization legislation that will be drawn up next year.

As for the budget limit, Capitol Hill people point out that the $1.345 billion in all likelihood will exceed by a substantial amount whatever figure OMB includes for NCI in the President's budget request that will go to Congress in January. It is possible the authorization limit would have discouraged any effort by Congress to meet the bypass request, but it was not a logical point on which to base a veto, they felt.

"We feel a bit abused and misled by the Administration," one congressinal staff member told **The Cancer Letter.** "In conference, we deleted much of what the Administration said it didn't want. We had the NCI wish list, and gave them everything they wanted. Where were they the last four years? This wasn't something that was added at the last minute. NCI's special authorities were not deleted. Some of it may have been relocated in the legislation, but it was there."

Both Sen. Orrin Hatch (R.-Utah), chairman of the Labor & Human Resources Committee, and Congressman Henry Waxman (D.-Calif.), chairman of the House Health Subcommittee, intend to make another effort with authorization bills next year. How determined they will be to push through the controversial items which supposedly brought on the veto remains to be seen. President Reagan, in his veto message, cited the attempt to estasblish two new institutes, for arthritis and nursing, along with additional

positions required for associate directors for disease prevention, as primary reasons for the veto. He also objected to codification of each institute's authority and to what he said was an attempt to impose "a uniform set of authorities for each research institution which disregards the more extensive mission of some institutes and overburdens smaller institutes which do not need these additional programmatic and advisory responsibilities."

Once again the effort by NCI, cancer centers, and the National Cancer Advisory Board to permit awarding of center core grants for up to five years has been frustrated, along with the attempt to increase the size of grants the NCI director may make without NCAB concurrence, from $35,000 to $50,000. Both are relatively noncontroversial but have been caught up in the past four years in, first the differences between House and Senate which resulted in only pro forma extensions of the National Cancer Act, and now in the veto.

MEMPHIS CCOP WITHDRAWS, CITES LACK OF PATIENT BENEFIT, EXCESS TESTS

The Memphis Cooperative Community Oncology Program became the second Community Clinical Oncology Program to withdraw voluntarily from the NCI supported effort to bring more community physicians and patients into clinical research.

Southwind CCOP, of Evansville, Ind., declined to accept first year funding after the review committee had cut its budget request by more than half.

Ronald Lawson, principal investigator of the Memphis CCOP, notified NCI of the group's decision not to accept second year funding in a letter to Carrie Hunter, CCOP program director:

"I regret to inform you that our CCOP physicians have elected to decline second year funding. As a result, we will not be participating in the program after first year completion. We will, of course, follow and adequately report patients previously entered on studies.

"We believe the major reason for our withdrawal from CCOP is the lack of significant clinical advantage to our patients by participating in most group studies. Perhaps if studies and/or effective drugs not available in the community had been more readily available, patient accrual would have increased. Also, additional work not related to clinical protocols placed an undue burden on already underfunded CCOP personnel. Considering the high level of community care delivered by our medical and surgical oncologists, the additional testing expense, often required hospitalization, and inconvenience to patients who live outside Memphis dictated by most protocols was not felt to be warranted. While all involved physicians agreed as as to the importance of clinical research, significant cost/benefit was not thought adequate at this time.

"We believe the CCOP experience has benefitted the Memphis (Methodist-St. Francis) oncology community and patient population. Physicians who had never worked with protocols now accept and understand that significant questions are addressed in such studies. Oncologists at both institutions have met and agreed on important personal and professional issues. Hospital administrators and nurses are now aware of and accept the need and mechanism for research efforts.

"Perhaps some would criticize our early withdrawal from the CCOP program. On the contrary, we believe our frank recognition of earlier discussed problems, and our resolve not to accept funds that would not be maximally utilized show maturity and dedication to realize quality patient care.

"We sincerely wish to thank all of you at NCI who have made this grant possible. We also appreciate those members of individual groups (SWOG-GITSG) who have assisted in our efforts."

Lawson told **The Cancer Letter** that 25 patients were entered on protocols during the year by his CCOP physicians. The goal had been 60 during the first year. A majority of the 25 were entered during the first six months, but as participating physicians became disenchanted with the program, accrual dropped off. Only three patients were entered during the final three months.

Lawson cited as one example of what his group felt was unnecessary testing a melanoma protocol calling for four CT scans a year as long as the patients live. "Some of them are cured, so that would mean four CT scans a year indefinitely. Our surgeons wouldn't bite on that. They felt it was extravagent."

An example of a protocol which Lawson said disregarded the best interests of the patient was one for small cell lung cancer. "We had a patient in which the bulk of the disease was below the diaphragm. After three or four cycles of chemotherapy, the primary lesion completely disappeared. The belly lesions had shrunk by about half. The protocol required that we stop giving drugs at that point and treat with radiotherapy. That would have meant that the patient would go three months without getting more chemotherapy. When we called to object, we were told to stay with the protocol."

Lawson also objected to a notice from NCI which said, "Congratulations. You have been selected to participate in a patterns of care study." The CCOP would have received $25 per patient, which Lawson said was not enough to hire anyone to handle the increased workload participation would require.

"When I called to decline the honor, I was told that we had no choice, that by accepting the grant, we had agreed to take part in these additional studies."

Lawson said that although CCOP members did receive a few phase 2 drugs not otherwise available to them, they had expected more.

"CCOP is a good idea, but I'm not sure NCI or the cooperative groups are attentive enough to the needs of private hospitals," Lawson said.

Withdrawal of Memphis leaves CCOP now with 59 programs out of the 63 awards originally made. Two, in Cincinnati and Mineola, N.Y., were dropped by NCI after the first year because of poor patient accrual.

ADDITIONAL DCE CONCEPT APPROVALS LISTED FOR NEW CONTRACT PROJECTS

Additional contract supported concepts approved by NCI's Div. of Cancer Etiology Board of Scientific Counselors follow below. These are for new contracts; other new contract concepts and new grant supported concepts appeared in last week's issue of **The Cancer Letter.** Concept approvals for contract programs being recompeted will appear in next week's issue.

Title: Occupational cancer in workers exposed to silica and asbestos in the North Carolina dusty trade industries. Estimated first year cost, $350,000, total for four years, $1.1 million. This will involve a noncompetitive, four year agreement with the Univ. of North Carolina, plus three year contracts for support services to be awarded competitively. Staff description of the project:

Purpose of this project is to test the hypothesis that occupational exposure to silica is a risk factor for lung cancer; to define the slope of the dose response relationship between asbestos exposure among asbestos textile workers and lung cancer; and to quantify the relationship between silica exposure and risk of silicosis and between asbestos exposure and risk of asbestosis.

This will be a collaborative project between NCI, the National Institute for Occupational Safety & Health, and the Univ. of North Carolina School of Public Health. To calculate working lifetime silica exposures, all silica dust samples obtained between 1935 and 1972 must be converted from million particles per cubic foot units to mass concentration, the method employed from 1972 to present; this will be accomplished using linear models, incorporating variables for commodities. The characteristics of the quartz crystal face and size distribution of quartz particulate in respirable samples will be investigated to determine factors which may account for observed differences in response (silicosis and lung cancer) across mineral commodities (e.g. crushed stone, foundry, granite, kaolin, etc.).

Prior to 1973, the records of workers not identified as having silicosis or asbestosis and who had not been employed in the previous five years were deleted from the state dusty trades files. Records of all workers employed or hired since 1973 have been maintained. A retrospective cohort mortality and morbidity study will be conducted on all workers active as of 1/1/74 and hired subsequently. This cohort can readily be enumerated from the state file, and followup of mortality and morbidity can be accomplished from Social Security Administration records, National Death Index, state death records, the state dusty trade file and claims to the North Carolina Industrial Commission. Detailed employment and exposure data are available in the state file. The cohort size for this study is approximately 30,000.

Extending a recently completed doctoral dissertation at UNC (Rice 1984), a case control study of silicosis will be conducted, using 350 cases identified and containing essential data in the state file through 1984 and 1,400 noncases from the same file. Cumulative quartz exposures will be calculated using environmental data converted to mass units as previously described. Quantitative risk estimates for silicosis and quartz exposure will be derived.

A retrospective cohort mortality study of all cases of silicosis (n=800) and asbestosis (n-350) identified in the surveillance program since 1935 will be conducted. Cause specific mortality experience of this case group will be contrasted with the experience of the U.S. and North Carolina. The mortality experience of subgroups, characterized by stage of silicosis and asbestosis, and by cumulative exposure to silica or asbestos, will be studied and should provide important information concerning cancer risks and other fatal sequelae in a group of heavily exposed workers.

Since 1935, approximately 20,000 workers have been employed in the four asbestos textile plants included in the North Carolina surveillance program. Due to culling of nondiseased from the files, this cohort must be reconstructed from employment files of the four companies. A retrospective cohort mortality study will be conducted on the cohort of workers employed 1935-73 and followed through 1983. Quantitative exposure profiles will be made for cohort members by linking work history records with job specific environmental air sampling, following the methods developed by Dement et al (1982). Internal mortality comparisons will be made between subgroups of the cohort categorized according to duration and period of employment, mean asbestos exposure intensity, and cumulative exposure doses. Resulting dose response curves will be compared with those derived by Dement et al at the South Carolina asbestos textile plant. For lung cancer, a nested case control study will be carried out to study dose response relationships as possibly modified by other characteristics of working conditions, e.g., fiber size and composition, and nonoccupational risk factors such as smoking. Smoking data are available inconsistently prior to 1964 and nearly completely since 1964. The inclusion of a sizeable proportion of women in this cohort will offer the opportunity to evaluate previous findings of equivalent lung cancer risks for men and women workers and of

excessive mortality from ovarian cancer.

All chest radiographs for cases of silicosis and asbestosis and for a sample of noncases will be reevaluated by qualified readers, and comparisons will be made between routine 4x4 films and standard 14x17 films. The results of independent readings will be analyzed for agreement.

Aaron Blair is the NCI project officer, Harland Amandus the NIOSH project officer, and Carl Shy of UNC the principal investigator.

Title: Development of referent population for occupational studies. Estimated cost $135,000 first year, $415,000 over five years. Staff description:

Cohort and proportionate mortality (PMR) analyses of employed populations have traditionally utilized the mortality experience of the U.S. general population to generate expected numbers of deaths. There are several limitations to this type of comparison such as differences in mortality patterns caused by the "healthy worker effect," incomplete ascertainment of deaths in study groups, and differences between the general population and employed groups with respect to other factors related to mortality (e.g., socioeconomic status, smoking, alcohol consumption). The most desirable comparisons would be those between populations under investigation and a referent (i.e. standard) population which is similar in all respects except for the exposure of interest. Comparisons of this type are usually precluded by prohibitive costs or the absence of appropriate data.

The Environmental Epidemiology Branch of NCI and the Industrywide Studies Branch of NIOSH have begun a collaborative effort to develop referent groups useful for epidemiologic studies of employed populations. NCI and NIOSH studies of occupational groups that have been completed or are near completion will be pooled to form a large referent group for use in future cohort and proportionate mortality ratio studies. This pooled referent will counter some of the methodologic difficulties presented by using the general population rates as a referent. The assumption is that a pooled data set from a variety of industries will represent an average of high and low industry specific disease risks, while minimizing the comparison problems caused by the "healthy worker effect," incomplete ascertainment of deaths, and socioeconomic status.

A great deal of interest in the development of such a system has been expressed by investigators at NIOSH and NCI and by nongovernment scientists. It is anticipated that the system will be heavily used by epidemiologists throughout the U.S.

The Referent Group System will produce referent population data in formats suitable for the Monson, OCMAP, and NIOSH packaged analytic programs. These are the primary analytic computer programs used for epidemiologic cohort and PMR studies. Study groups eligible for inclusion in the system are those for which data have been edited, analyzed and reported in the scientific literature or at scientific meetings. Approximately 600,000 workers from about 65 completed NCI and NIOSH cohort studies will be eligible for inclusion within the next two to three years. It is anticipated that the system will include more than 6 million person years at risk for cohort comparisons, and more than 60,000 deaths from PMR studies will be available for inclusion in the system.

Data from each study group to be included in the system will be edited and converted to a standardized format. ICD codes for underlying cause of death will be converted to the appropriate group codes so that rates can be generated for the Monson, OCMAP or NIOSH packaged programs. Information collected on study groups will be combined so that investigators may obtain referent group rates (or proportions) by race and sex, for specified combinations of referent group study populations, persons in specific geographic regions, blue collar or white collar workers, smoking history (if available), or workers employed in specific time periods. Updates to the system will be conducted on a regular basis by adding newly completed studies.

A feasibility study that pooled data from PMR studies completed at NCI indicated that data sets can be converted to standard formats with relative ease. Some of the programs necessary to generate comparison rates have been developed by NCI staff.

When the system has been developed and adequately tested, it will be made available to epidemiologists in the U.S. Documentation of the system will include a description of each cohort, including numbers by sex and race, summary of findings, and references. Tabulations by age, sex, race, geographic region and other variables will be provided for the entire pooled data set and comparisons of pooled referent group mortality with the U.S. general population will be shown.

Funds are being requested from the NCI/NIOSH interagency agreement for a resource contract to provide support for developing appropriate computer software for the Referent Group System, integrating software into a user friendly system, documenting the system, recoding data sets and converting to a standard format. This contract will also include support necessary for regular system updates and coordinating requests from investigators outside of NCI and NIOSH. The first two years of the contract will be devoted to the development of the system, converting cohort data to standard formats, constructing the pooled data set, and documenting the system. The final three years of the contract will be devoted to management and administration of the system and conducting the first update. The update will consist of adding newly completed studies to the system and making appropriate amendments to the documentation. All work will be conducted under the direction of the NCI and NIOSH project officers, Terry Thomas of NCI and Robert Roscoe of NIOSH.

Title: Carcinogenic effects of Black Rock Harbor sediment on mollusks and fish. Estimated first year cost, $153,000, total for two years, $446,000.

Accumulated quantitative fish tumor data indicate occurences of benign skin and hepatic neoplasms to be prevalent among certain demersal species such as dover sole in coastal California waters, English sole and starry flounder in Puget Sound, brown

bullheads in Buffalo and Black rivers of New York and Ohio, respectively, and tomcod in the Hudson River, for example. These tumors, and fin erosion disease sometimes observed in tumorous fishes are generally observed to occur in those populations of demersal fish species that have prolonged contact with substrates rich in organic matter and that derive food energy from infauna and epifauna living in these benthic environments. Occurrence of high tumor incidence in highly organic, contaminated sediments in comparison to reference areas suggests that such substrates contain biologically available tumor inducing substance that act via direct contact and/or trophic transfer.

The Environmental Protection Agency and Army Corps of Engineers are jointly conducting laboratory and field programs designed to assess risks associated with aquatic disposal of dredged materials. EPA's Environmental Research Laboratory is involved in a major effort concerning the biological and chemical characterization of dredged Black Rock Harbor sediment to evaluate environmental consequences of aquatic disposal. The Black Rock Harbor (Bridgeport, Conn.) study area is located 400 meters south of a fork in Cedar Creek and extends seaward about 1,700 meters. Dredged material containing pollutants from various nonpoint sources such as atmosphere and urban runoff and point sources such as industrial and sewage treatment plants is currently being disposed of at a designated site in Long Island Sound. Classes of chemicals identified in dredged material include polynuclear aromatic hydrocarbons, polychlorinated biphenyls, oils, greases and heavy metals. Substantial amounts of these organic and inorganic chemicals in Black Rock Harbor sediments were demonstrated to be biologically available to blue mussels in 28 day flowing seawater contaminant uptake tests. Oysters and winter flounder receiving long term exposure to contaminated sediment showed neoplastic cellular growth while such neoplastic growth was not observed in control animals exposed to "clean" sediment.

In preliminary exposure tests with the American oyster, kidney tumors were found in two of 10 exposed to a suspended concentration of 20 mg/liter of dredged material for 31 days. A reproductive tract tumor was found in another. Kidney tumors associated with these exposures were of tubular epithelial cell origin. In one case, the tumor had metastasized into visceral ganglia and associated nerve fibers. In similar tests with the winter flounder, pituitary alterations were observed in first year animals exposed to 100 per cent sediment for 41 days. A presumptive cellular proliferation was observed in one animal in the anterior glandular area. Cellular alteration consists of basophilic foci presumed to be neoplastic. Acidophilic cell necrosis was observed in all six animals examined. In addition, effects on thymus tissue (depletion of thymocytes) and the central nervous system (abnormal histological and behavioral patterns) were observed, as well as classical symptoms of fin erosion prior to the end of exposure.

These preliminary EPA studies, while not conclusive, suggest a relationship between the occurrence of renal and gonadal tumors in the oyster, the rare pituitary tumor in flounder, and exposure to Black Rock Harbor sediment. The potential ability of this sediment to induce malignant tumors in aquatic species may have important implications for comparative oncology and issues of public health. Accordingly, we propose a more rigorous evaluation of the tumorigenic properties of Black Rock Harbor sediment.

Laboratory controlled dose response experiments with Black Rock Harbor material will be conducted with statistically relevant numbers of adult American oysters and zero and one year class winter flounder using appropriate controls and state of the art methodology. Precise control of suspended particulate levels that mimic realistic on site resuspension of concentrations for long term in vivo oyster exposures to Black Rock Harbor materials has been made possible by a transmissometer microprocessor feedback system developed by EPA. In addition to long term, direct uptake exposures, we propose investigating effects of dietary exposure on winter flounder. A natural diet consisting of three bivalve genera representative of deposit, filter and combination of deposit and filter feeders will be exposed to Black Rock Harbor material and then fed to unexposed control winter flounder to assess effects of contaminant uptake via trophic transfer. An in vitro assay (Ames test) will be used with these bivalves to assess bioaccumulation of mutagenic agents, and to determine if genetic activity correlates with chemical profiles of fish tissue uptake. Intragastric intubation and injections also represent a viable approach to study of carcinogenic effects of BRH sediment. Laboratory studies proposed, using a mollusk and a fish species, are designed to document the materials association with tumor formation and to provide meaningful qualitative and quantitative measures including reproducibility. Composite tissue samples from selected tissues for residue analysis of bioaccumulated contaminants are planned in support of laboratory experiments.

In conjunction with laboratory exposures, we propose to compare laboratory derived effects and chemical uptake to feral animals collected from and/or exposed in situ at the Long Island dredged material dump site. These planned field studies will consist of otter trawls for winter flounder and caged oyster and flounder at three stations aligned on a transect through the dump site. Statistically sensitive sample sizes, based on expected variability, have been calculated for both phases of field study. In addition to histopathological characterization, chemical uptake information will be correlated with tissue residues of known carcinogens resulting from bioaccumulation in laboratory and field studies. From these studies we expect that a clearer understanding of carcinogenic potential can be estimated in the laboratory while field derived data will serve as baseline information and as verification of laboratory results. Laboratory and field studies will be conducted using inhouse and EPA accepted quality control/assurance procedures.

Assuming a relationship is demonstrated between

tumor occurrence in test species and sediment exposure, subsequent exposure tests with potential carcinogenic or tumor enhancing agents identified in the sediment may provide additional information useful in identifying causes. Several potential causative agents have been identified and these could be tested individually, or in various combinations. Polynuclear aromatic hydrocarbons should include initiators and complete carcinogens, whereas polychlorinated biphenyls, some oil fractions and perhaps certain heavy metals, may have importance as tumor promoters or enhancers of the carcinogenic process by other mechanisms. The possibility that genotoxic agents may activate viruses that induce neoplastic transformation should also be considered. One approach to the possibility of a viral origin would involve dosing with noncarcinogenic but virus activating substances (e.g. 5-bromodeoxyuridine) correlating tumor occurrence with that associated with direct sediment exposure.

Disposal of chemically characterized dredged material into Long Island Sound has created a unique field situation for assessing cause and effect relationship of neoplasia in two species of marine organisms. We are of the opinion that while tumor studies herein proposed can be useful to aid identification of potential hazards to marine communities and possibly to issues of human health, results of the proposed study can also convincingly serve as evidence and a basis for regulating marine disposal of causitive agents. Project officers are Paul Yevich for EPA and Morris Kelsey for NCI.

Title: Environmental pollutants data base—a collaborative resource. Estimated first year cost, $175,000, total for three years, $600,000. This will be competed as master agreements, with qualifying organizations eligible to further compete for individual projects as they become available.

The Div. of Cancer Etiology Office of the Director has maintained a data base of potential carcinogens which occur in various environmental media. This resource information contains summaries of published data on in vivo and in vitro biological activities for animal and potential human carcinogens found in air, water, food, drugs, cosmetic ingredients and the workplace. Special reports which organize and evaluate the quality of the data have been prepared under contract and contain large amounts of published data which encompass several scientific disciplines including chemical/physical parameters, in vivo and in vitro carcinogenesis, environmental occurrence and fate, population exposure estimates, pharmacokinetics and epidemiology. All reports prepared under these contract mechanisms have been reviewed independently by outside experts in their respective fields before being released to interested members from government, academia and the private sector. In addition, these documents have been quite useful in responding to information requests from various segments of DCE, NCI and other governmental agencies as well as to other individuals within the scientific community.

The main objective of this procurement is to continue to review and evaluate the published literature for data relevant to the areas of carcinogenesis, toxicology and epidemiology with respect to the presence of carcinogens in various environmental media. Contractors selected under a master agreement will be asked to perform a wide range of tasks such as supplying bibliographies covering specific topics of interest, providing critical analyses in defined areas of carcinogenesis and toxicology, preparing special reports with specific formats request by the project officer, organizing and entering data for computer based files and other activities such as updating, modifying or editing previous reports for DCE.

While the intent of this procurement is to provide some flexibility with respect to tasks awarded under such a contract mechanism, some specific projects of interest can be cited as examples of the types of activities envisioned. Previous efforts under the former contracts have focused on information on environmental carcinogens or mutagens present in a single medium such as air or water. However, these agents often appear in several media and/or several sources within a given medium. One example of this multimedia approach has been attempted in the case of the "Report on Air Pollutants" where quantitative occurrence data were tabulated for sources other than air including water, soil and food. Therefore, tasks planned under this project could include studies of the occurrence of specific chemicals/pollutants which are found in various media and detailed information on total exposure estimates in humans. Examples of similar tasks which use a "systems approach" have been performed by the National Academy of Sciences for nitrate/nitrite and N-nitrosamines. Therefore, more emphasis in obtaining detailed exposure estimates will be conducted, where possible for pollutants which pose serious and/or potential health problems.

Unlike the previous information resource contracts, specific projects will also be developed with the assistance of appropriate representatives from NCI, EPA, and other agencies where needed. This mechanism will provide assurance that the products of this data base will be of interest and will not duplicate any ongoing programs of these respective agencies. Information developed from these tasks will be used to expand current information on various environmental agents and, more importantly,

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CONCEPT REVIEW FIGURES ARE ESTIMATES ONLY: RFPs, RFAs NOT YET AVAILABLE

The dollar estimates with each concept review brought before the various boards of scientific counselors are not intended to represent maximum or exact amounts which will be spent on those projects. They are intended only as guides for board members to help in determining the value of the projects in relation to resources available to the entire program or division. Responses should be based on the workscope and description of goals and methods included in the RFPs (contracts) and RFAs (grants and cooperative agreements). Availability of RFPs and RFAs will be announced when the Institute is ready to release them.

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will be disseminated to the scientific community in general.

Examples of current collaborative activities within DCE include the preparation of monographs on selected potential carcinogens in the workplace for the Occupational Studies Section. The purpose of this study is to identify possible cohorts by tracing chemicals back to industries and specific occupations within those industries. Preliminary discussions with the Chemical & Physical Carcinogenesis Branch indicate that this information resource activity would be helpful in preparing summary in vivo/in vitro data relevant to carcinogenesis for compounds and their metabolites currently included in or planned for inclusion in the Chemical Carcinogen Reference Standard Repository. Information resources developed previously concerning chemoprevention and selected natural toxicants in foods could also be utilized, expanded, or modified for use in programs concerned with chemoprevention and mutagens in foods.

EPA has indicated it would share its large "Gene Tox" data base on known and suspected carcinogens with NCI. This resource includes computer graphic packages which contain important data on carcinogenic potency, environmental exposure and other relevant toxicological and environmental parameters. Since this data base is evaluated by an Interagency Expert Panel (NCI, NIEHS, EPA) and is an ongoing activity, EPA would be interested in utilizing this NCI project to obtain carcinogenesis data for priority chemicals that will be included in this data base.

Project officers are Morris Kelsey for NCI and Stephen Nesnow for EPA.

RFPs AVAILABLE

Requests for proposal described here pertain to contracts planned for award by the National Cancer Institute unless otherwise noted. NCI listings will show the phone number of the Contracting Officer or Contract Specialist who will respond to questions. Address requests for NCI RFPs, citing the RFP number, to the individual named, the Blair building room number shown, National Cancer Institute, NIH, Bethesda, MD. 20205. Proposals may be hand delivered to the Blair building, 8300 Colesville Rd., Silver Spring, Md., but the U.S. Postal Service will not deliver there. RFP announcements from other agencies will include the complete mailing address at the end of each.

RFP NIH-ES 85-3
Title: Toxicity and carcinogenicity studies in laboratory animals
Deadline: Approximately Feb. 1

The National Toxicology Program, National Institute of Environmental Health Sciences, is soliciting sources capable of performing toxicology and carcinogenesis studies in rodents via (1) dosed feed, gavage, dermal (skin paint) and dosed water routes of administration, and/or (2) inhalation route of administration. Offerors must be capable inhouse or by subcontract of performing hematology, urinalysis, clinical chemistry and reproductive toxicology studies. Offerors must also be capable of performing all prechronic studies and/or chronic studies. In addition, offerors may be determined capable of conducting special studies in neurobehavioral toxicology.

This is the biannual master agreement announcement which seeks to enlarge the pool of current master agreement holders for this program. The initial award is nonmonetary and is exclusively for the purpose of establishing eligibility to compete for future specific chemical studies (master agreement orders). Current master agreement holders may seek to become eligible for neurobehavioral toxicology studies and/or the inhalation route of administration if not currently so determined. They may also submit proposals for eligibility of additional facilities.

NIEHS Contracts Management Office
Attn: Hollis Hawkins
PO Box 12874
Research Triangle Park, N.C. 27709

NCI CONTRACT AWARDS

TITLE: Followup study of patients treated for hyperthyroidism
CONTRACTORS: Univ. of Southern California, $228,644; and Research Triangle Institute, $490,493.

TITLE: Tracing through sources to determine vital status of dry cleaning workers
CONTRACTORS: Equifax Inc., Atlanta, $18,000; Hooper Holmes Inc., Basking Ridge, N.J., $25,200; and Johns Holding Co., Decatur, Ill., $12,450.

TITLE: Tracing through sources to determine vital status of x-ray technologists
CONTRACTOR: Johns Holding Co., Decatur, Ill, $71,694.

TITLE: Thyroid disease following 131(I) therapy for hyperthyroidism, interagency agreement
CONTRACTOR: Dept. of Energy, Brookhaven National Laboratory, $394,289.

TITLE: Nutrition intervention trial in Linxian, China
CONTRACTOR: Cancer Institute, Chinese Academy of Medical Sciences, Pan Jia Yao, Chaoyangqu, China, $478,886.

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