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BUDGET CUTS DELAY NEW COOPERATIVE DRUG DISCOVERY GROUPS FOR LUNG, COLON CANCER AT LEAST ONE YEAR

A major casualty of the budget cuts NCI is facing in the 1987 fiscal year will be significant portions of the disease oriented strategy for new drug development, specifically two new national

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In Brief

KENNETH OLDEN NAMED DIRECTOR OF HOWARD CANCER CENTER; CALHOON SPARKED AMA ON CIGARETTE ADS

KENNETH OLDEN is the new director of Howard Univ.'s Cancer Center and chairman of oncology. A professor in the oncology department, he assumed his new post after serving as deputy director of the center for the past three years and associate director for basic research since 1979. Olden held various positions at NIH from 1974 to 1978, including senior staff fellow and expert in biochemistry. He replaces Jack White, who resigned as director last year. . . . **ED CALHOON**, Beaver, Okla., surgeon and a member of the National Cancer Advisory Board, spearheaded the American Medical Assn.'s recent effort to seek legislation banning all cigarette advertising. That effort was doomed by concerns that any attempt to restrict advertising in the print media would violate the First Amendment. The federal government can control advertising on TV and radio, where cigarette advertising has been prohibited since the early 1970s. AMA's newly aggressive position against the tobacco industry, the result of Calhoon's battles, could help put pressure on newspapers and magazines to voluntarily drop cigarette advertising . . . . **WILLIAM HAENSZEL**, senior epidemiologist for the Illinois Cancer Council and a member of the Board of Scientific Counselors of NCI's Div. of Cancer Etiology, will receive the Distinguished Achievement Award from the American Society of Preventive Oncology. The presentation will be made at ASPO's annual meeting, March 5-7, in Bethesda. . . . **ONCOLOGY NURSING** Society's annual lectures, to be delivered at the Society's 11th Congress in Los Angeles April 30-May 3: Marilyn Stromborg, professor at Northern Illinois Univ. School of Nursing, will give the Mara Mogensen Flaherty Memorial Lecture May 3; and Deborah Welch-McCaffrey, oncology clinical specialist at Good Samaritan Medical Center in Phoenix, will give the ONS/ Schering Clinical Lecture May 2. Jane Brody, science news reporter and health columnist for the New York Times, will present the keynote address April 30. . . . **HERMAN SUIT**, chief of radiation therapy at Massachusetts General Hospital and Harvard Medical School, has been named the first Gilbert H. Fletcher Distinguished Professor at M.D. Anderson Hospital & Tumor Institute.

FOUR LUNG, TWO COLON CANCER GROUPS PLANNED, PUT ON HOLD BY BUDGET CUTS

(Continued from page 1)
cooperative drug discovery groups, for lung and colon cancer, unless Congress adds substantially to the President's budget request.

The Div. of Cancer Treatment's Developmental Therapeutics Program two years ago shifted emphasis in its screening of potential anticancer agents from searching for any antitumor activity to looking for activity against specific forms of cancer. To follow up on that emphasis, DTP drew up plans for the lung and colon cancer groups patterned along the lines of the broader National Cooperative Drug Discovery Groups already in place.

DTP had hoped to support four lung cancer and two colon cancer groups, at an estimated annual cost of about $500,000 each. Awards would be through cooperative agreements, for five years. However, the Gramm-Rudman-Hollings cuts in the 1986 budget and further reduction sought by the White House for 1987 make it unlikely that that much money will be available. DCT Director Bruce Chabner told the division's Board of Scientific Counselors that "we're not really asking for concept approval" of the new groups at this time.

The situation could change if the Supreme Court rules GRH is unconstitutional, a ruling that could be made by July; and/or if Congress beefs up the budget, which probably will not be known until completion of the 1987 appropriations bill later this year. The proposals probably will not go back to the BSC before its October meeting, possibly not until the first meeting in 1987.

DCT's new drug efforts have already been hit hard be cutbacks in contracts, which support the screeing program.

DTP said in its justification for the two new groups that the high incidence, morbidity and mortality of lung and colon cancer "requires a concerted multidisciplinary effort aimed at the discovery of new and effective therapies." Goals of the multidisciplinary and multi-institutional groups would be "elucidation of unique and fundamental aspects of pulmonary and colon biochemistry, biology and pathobiology of potential relevance to lung and colon cancer treatment; and exploitation of those unique features in the conceptualization, creation and preclinical investigation of new drugs and strategies" for treatment.

Each of the groups would include scientists with specific interests or expertise in lung or colon biology and pathobiology, and where appropriate medical personnel, pharmaceutical and synthetic chemists, biologists, biochemists, molecular biologists and pharmacologists.

"Operationally, the principal investigator will be the conceptual focus of the group and, depending on the perceived needs of the project, will extend invitations to appropriate scientists in other institutions to participate," DTP said. ". . . Ideally, the (cooperative agreement) application should address all phases (e.g. conceptualization, design, synthesis, testing and evaluation) of discovery and development of new types of anti lung and colon cancer agents together with a sound and detailed rationale."

The Board did approve the concept of a contract supported project for development and implementation of mechanistically oriented antitumor drug prescreens. DTP Director Michael Boyd requested approval for as much as $3 million a year which he said would support 10 assays.

After Board member Susan Horwitz asked if the project could be implemented on a smaller scale, Boyd said it could be done with one or two assays to start. "We don't have the money now anyway to implement it all at once."

The Board approved the concept, to start with two assays an annual estimated cost of $300,000 each. DTP's description of the project:

"Recent advances in basic cancer research have have made possible the identification of increasing numbers of targets for antitumor drug development. In the case of small cell lung cancer, an example would be the autocrine growth factor bombesin. Other examples might include oncogenes and their expression in malignant cell populations, the various steps in the metastatic process such as lammin/receptor interactions, secretion of type IV collagenase, etc.

"Identification of such targets makes feasible the development of specific mechanistically oriented antitumor drug prescreens. Such prescreens could be of great value when used in conjunction with the in vitro disease oriented cell line screening project currently under development at the Frederick Cancer Research Facility. This latter project has been planned as a primary drug screening model with an annual testing capacity of 10,000-20,000 compounds. The potential of this primary screen for detection of compounds with selective cytotoxicity for particular tumor types could be significantly increased if relevant mechanistically oriented biochemical prescreens were employed.

"Examples of such prescreens which might be developed in the context of a disease oriented drug development program might include tests for agonists/antagonists of bombesin/receptor interactions as for EGF receptor, and for inhibitors of protein Kinase C. Compounds shown to be specific inhibitors of such processes (prescreen actives) could then be subjected to screening in the disease oriented cell line panels with special emphasis on specific cancer types (e.g., bombesin directive actives tested against small cell lung cancer). Use of senstitive cell free prescreens could allow for testing of very large numbers of compounds and focus the cell line screen on compounds enriched for biological activity relevant to tumor types of interest.

"Appropriate molecular targets for development of prescreens will be identified through annual workshops involving recognized outside experts as well as NCI staff. In addition to consideration of the relevance and potential for exploitation of various molecular targets, extensive consideration of the feasibility of development of high capacity assays will be included.

"In future years this annual workshop will provide a forum for review of progress as well as identification of additional new targets for prescreens. In order to exploit multiple targets with this prescreening strategy, multiple prescreens will be operated simultaneously and new prescreens added as technology and testing capacity permit.

". . . Each (prescreening model will have) a testing capacity of 10,000 compounds. Contracts for development and implementation of these individual prescreening models will be on a national competitive basis. In order to coordinate these multiple short term (one to two year) contracts and allow maximal flexibility in program management and response to identification of new molecular targets, a centralized management mechanism will be used through the FCRF contract. Each individual prescreen is anticipated to require some model development effort (three to six months) prior to implementation of large scale screening and to require one to two years for screening 10,000 unknown compounds or natural product materials."

"There is a lot of uncertainty about what can be done, considering the budget," Chabner said.

"The idea is good but we should start as soon as possible," Horwitz said.

"The sense of the Board I get," Chabner said, "is in this time of fiscal crisis, to start on a smaller scale and come back when more money is available."

The Board unanimously passed Horwitz' motion to approve the concept, with a $600,000 limit.

The Board also gave concept approval for non competitive continuation for three more years of the contract with the Japanese Foundation for Cancer Research to provide information services in support of cancer treatment research. Estimated cost is $19,000 a year. The contractor since 1978 has operated a liaison office in Japan to gather new information developed in that country on experimental, preclinical and clinical cancer chemotherapy.

FREE STANDING CANCER CENTERS COMPANIES EXPANDING MARKETS

The private development of for profit freestanding cancer centers (FCCs) is continuing to grow, with companies specializing in the development, construction and management of the centers reporting an increase in activities.

Salick Health Care, one of the publically traded FCC firms, is in the process of trying to raise $30 million through a convertible bonds issue. According to a Jan. 31 prospectus issued by the firm, the proceeds will be used "for the development of comprehensive outpatient cancer centers and networks both as a joint venturer and independently and for general business purposes."

The company operates or manages four chronic outpatient dialysis facilties with 108 treatment stations, and provides acute inpatient dialysis services at seven hospitals.

Salick's wholly owned subsidiary Comprehensive Cancer Centers Inc. opened its first outpatient cancer center in interim space at Cedars Sinai Medical Center in July (**The Cancer Letter**, July 19). The company has a 10 year agreement to develop its initial cancer center there, and expects to complete construction of a permanent 50,000 square foot cancer center in approximately one year.

When the center is completed, Salick will pay the hospital $1 million per year and 15% of the center's defined net profits during each of the first five years and 20% during the next five years. During the construction period, the company will operate the hospital's radiation therapy department, paying $54,000 per month plus 15% of defined net profits, if any, from the operation.

CCC also entered an agreement in principle with American Medical International, a for profit hospital management company, to establish at least three cancer center networks (**The Cancer Letter**, July 19).

In the prospectus, the company says it believes that its FCC program "represents an innovation in the provision of services for the diagnosis and treatment of cancer patients." Discussing "significant aspects" of the program, it states that "convenience to the patient will be the primary consideration in scheduling treatments and procedures," noting that the centers' services will be available 24 hours a day, seven days a week.

Quality of care considerations include state of the art diagnostic equipment and trained staff available to physicians and patients utilizing the centers, individualized patient care plans, and computerized record keeping. It notes that published studies "indicate that reduced side effects from intensive chemotherapy can often be achieved for patients treated during lengthier sessions," adding that the centers "will provide intensive chemotherapy to the numerous patients who may benefit from this method of treatment."

Asserting that the outpatient setting will be more cost effective than hospitalization, it says the company "believes that the overall cost of patient treatment will be reduced because of the rapidity of diagnosis and implementation of treatment and the avoidance of duplicative tests and services, inconsistent procedures and unnecessary hospitalization."

The firm advises potential investors, however, that they should "carefully consider" certain factors such as the company's limited experience in establishing and operating the centers and networks. It also notes the centers' dependence on physician, patient and third party utilization; competition from other providers; and governmental regulations that may restrict or prohibit the firm's expansion into certain states.

Although outpatient services provided by the center are not currently subject to Medicare's prospective payment system based on diagnosis related groups, the prospectus warns that payments could be reduced due to the Gramm-Rudman-Hollings balanced budget legislation enacted in December.

Last year, Salick had a net income of $1.486 million. In the first quarter of fiscal year 1986, which ended Nov. 30, the company's net income was $570,000.

Salick elected Victor Chaltiel and Paul Rogers to its Board of Directors in January. A member of Congress form 1955 to 1979, Rogers chaired the House's health subcommittee, playing an instrumental role in enacting the National Cancer Act of 1971. He is currently a member of the Washington law firm of Hogan & Hartson, and serves on a number of boards of directors and trustees, including the Institute of Medicine of the National Academy of Sciences, the Rand Corp. and Merck & Co. Rogers, 64, is also chairman of the National Council on Patient Information and Education.

Chaltiel, 44, joined Salick in May 1985 as president and chief operating officer. He was formerly president of the Artificial Organs Div. and corporate group vice president at Baxter Travenol Laboratories, Inc.

Another publicly held FCC firm, Comprehensive Cancer Care Corp., changed its name to CompreMedx Cancer Centers Corp. in December. The company is a subsidiary of Continental Health Affiliates, which also owns a dialysis center, a pharmacy, and a home health and nutritional therapy company.

CompreMedx opened its first FCC last March in Lake Arrowhead, Calif. The company just opened its second FCC in West Orange, N.J. in December.

The new center offers oncology services through a "six man oncology group" and diagnostic radiology through a nine man radiology group, Matthew Smith, vice president of marketing and operations, told **The Cancer Letter.**

Radiology services include computerized tomography, radiography, flouroscopy, nuclear medicine, ultrasound, and mammography. The center also offers complete home health care services, such as nursing services, medical supplies, medical equipment and drugs.

The center also has on site laboratory services, a pharmacy, psychosocial support services, home and on site infusion services, nutritional services for enteral and parenteral nutrition, and pain management.

The medical director at the West Orange center is Frederick Cohen, director of the New Jersey division of the American Cancer Society.

Although the company had estimated last summer that it would have four to six centers operational by the end of 1985, Smith told **The Cancer Letter** that the process of opening a center is "far more involved than [the firm] initially imagined." Most delays are due to licensing, and working out arrangements with physicians, he said.

CompreMedx is still negotiating the establishment of centers in Florida, Boston and Virginia.

A third firm, Intercommunity Cancer Centers, currently has eight centers in operation. Formerly named Health Corp., the company is part of CDP Associates, a La Jolla based consulting firm that designs and constructs university based cancer centers, community based centers and medical facilities management.

ICC's most recent FCC opened in November in Leesburg, Fla. The company has six more centers planned, three of which will be located in New Orleans. The remaining three will be located in Pittsburgh, St. Louis and Hinsdale, Ill.

Another four centers are currently under construction, but will not be run by ICC. Those include the Raleigh Regional Cancer Center in Berkley, W. Va., the Northwest Alabama Regional Cancer Center in Shegfield, Ala., and one with the working title CKP Partnership Cancer Center to be located in Belleville, Ill. The fourth is another building that is being constructed for Mary Washington Hospital's Cancer Center of Virginia in Fredricksburg, which opened in October. ICC "probably has 15 more [centers] in various stages of study and planning," Dick Allen, CDP vice president for corporate development, told **The Cancer Letter.**

A number of people have expressed concern about the rapid proliferation of the FCCs, and their impact on the availability of patients for clinical research, and the inclusion of patients treated at the facilities in cancer statistics. Those issues surfaced at a recent meeting of the Div. of Cancer Prevention & Control's Board of Scientific Counselors.

Patients treated in FCCs "are going to be completely outside the realm of clinical research," Lucius Sinks told the board, adding that the centers will cut into referral of patients to clinical centers. The chief of NCI's Cancer Centers Branch, Sinks also expressed concern that the centers "are totally uncontrolled," with no review or accreditation by the Joint Commission on the Accreditation of Hospitals. He added that many of the centers being established "will not have the proper mix" of health care providers needed to provide quality cancer care.

Other concerns include the exclusion of patients from tumor registries or NCI's SEER (Surveillance, Epidemiology, and End Results) data base. CompreMedx's Smith said he believed physicians treating patients at the company's centers will include those patients in the appropriate tumor registry.

The issue of data collection on patients treated at FCCs and their inclusion in tumor registries is one of several issues surrounding FCCs that will be addressed at a two day symposium to be held in May (See related story).

NCI has been considering efforts to both standardize tumor registries and to expand its SEER data base by the inclusion of non SEER data bases.

One reason for the expansion of the SEER data base is the increasing number of patients who are being treated entirely on an out patient basis, and therefore are not counted in the SEER incidence data.

DCPC Operations Research Branch Chief Edward Sondik told the board that the number of non NCI tumor registries is growing and could be a useful resource for the institute. A number of options under consideraton by NCI include the addition of one or more of the registries to NCI's SEER program. "We need more information on Hispanics, particularly in the Southwest," he said. Although the collection of data on Hispanics in the Southwest is a priority, "it is not something we can afford right now," he said.

Another option under consideration by NCI is a consultation program in which NCI will work with new registries as they are planned and emerge. Such work would include the standardization of definitions and quality control. NCI is proceeding with a plan toward working with registries on a more organized and more formal basis, he said. "One idea is to establish an association of tumor registries," with NCI to serve as the group's mentor, he added.

NCI will also propose the modification of SEER to obtain more information on treatment, particularly in the first year.

Following a pilot study involving the standardization of tumor registries in three cancer centers, NCI's next step will be to try the standardization in community hospitals, Jerome Yates told the board.

TWO DAY SYMPOSIUM TO ADDRESS MAJOR ISSUES SURROUNDING FCCs

A two day national symposium to be held at Fox Chase Cancer Center May 13-14 will make an effort to address some of the issues that have come to the forefront in the development of FCCS. The meeting is sponsored by the Fox Chase Cancer Center, CDP Associates and Intercommunity Cancer Centers.

The symposium is intended to provide a comprehensive exploration of current issues surrounding FCCs and their role in research and treatment. In addition to examining the research, investments and administrative activities involved in cancer programs, the symposium will attempt to address several specific issues related to the centers.

Specific issues to be discussed at the symposium are:

*Is there a role for the surgeon in FCCs?

*Are new technologies appropriate for FCCs? For example, the use of monoclonal antibodies in an out patient facility.

*How does FCC marketing influence cancer self referral patterns and how can self referrals be appropriately handled in a multi-disciplinary care setting? Planners of the symposium want to look at whether marketing by FCCs will create the same kind of self referral patterns experienced by comprehensive cancer centers, and what kind of policies the facilities should have for self referral patients.

*How the increasing demand for second opinion clinics and screening detection programs can be accommodated to avoid problems with primary care physicians.

*What is the most appropriate role for FCC networks in patient accrual and data reporting for clinical investigations. Can it be financially supported without federal funding?

Karen McGarry, CDP senior associate, said that most FCCs won't have access to tumor registries, and will need a method of data collection. The working group will examine, for example, what kind of system FCCs could form for automated data collection.

*What are various operating economics of FCCs and how different reimbursement schemes affect the economics of the centers. For example, how to operate a cancer center to build in a no charge psychosocial support programs available in comprehensive cancer centers, such as "I Can Cope."

*What research and operational data systems are required to efficiently monitor and report FCC statistics.

*What benefits must be realised by programmatically linking FCCs to each other and how these can be most effectively linked.

The first day of the program will consist of five modules in the areas of 1) research and new technologies; 2) operations (reimbursement, physician relations, community relations and marketing); 3) clinical programs and services; 4) organization and financing; and 5) data management.

Fox Chase President John Durant will chair one of the clinical modules. Each module will have a chairman and cochairman as well as faculty who will help lead working groups of participants as they debate the various issues and try to reach a recommendation for the questions raised in the symposium and discussions. For example, participants discussing the role of surgeons in FCCs may find that it is appropriate for certain biopsies to be performed at the centers, but that it would be inappropriate to do major resections, McGarry said.

The second day of the symposium will consist of presentations by the various working groups of their recommendations.

Persons interested in attending the symposium should call Ron Gilden of CDP Associates at 404-391-9872.

CDP is also sponsoring two regional seminars designed to help physicians, hospital administrators and other health care personnel understand the process of developing a FCC. The seminars will be held in Phoenix March 6-7, and at Hilton Head April 10-11. The seminars will include presentations by CDP officials on topics such as planning and feasibility; reimbursement issues; financing; capital formation with a specific emphasis on joint ventures; design and construction process; and management. Four or five case studies will be presented by hospital administrators or physicians associated with centers CDP has planned and built, who will discuss their experiences in how and why they developed a FCC.

ALTERNATIVES TO ANIMAL USE IN RESEARCH OUTLINED IN OTA REPORT

Alternatives to the use of animals in research could include increased usage of computer or mathematical analysis as a substitute for animal studies, the Office of Technology Assessment suggests in a recent report on "Alternatives to Animal Use in Research, Testing and Education." The report states that "when the biological effect can be represented by a known equation, computer or mathematical analysis can be applied as a substitute for animal studies." It adds, however, that the technique "usually requires animal validation studies." Computerized dissemination of testing and research results could also reduce some animal use, OTA advises.

The use of computer or mathematical analysis is identified as one of the most promising areas for the development of alternatives to animal methods. Other promising areas are:

*Physio-chemical techniques to identify human responses to chemicals and biological substances. In some instances, these techniques "are more sensitive and less costly than animal models," and may eliminate or reduce the use of animals in some research areas, it says.

*Microbiological systems to replace some animal tests to screen for specific responses to chemicals. Noting that the tests are first validated against traditional animal models, the report says, "there is a debate about the reliability of tests in this category." Tests for mutagenicity such as the Ames test are used primarily for screening, it adds.

*Tissue culture preparations can also be used as screening tests to reduce the number of animals used, although validation with an animal model must be established.

*Epidemiological surveys using existing data or previously exposed species data are useful to limit the range of investigation regarding a chemical or other substance in order to reduce the number of animals that would have been used in a research effort.

Plant analysis "has had limited success in biomedical research," it says. Plant substitution can be used to demonstrate some effects of exposure to certain substances and relate the effect to humans, resulting in the use of fewer animals and lower research costs.

Advantages of alternative methods include the reduction in the number of animals used; reduction in investigator induced, artifactual physiological phenomena; savings in time, with the benefit of obtaining results more quickly; the ability to perform repetitive protocols on a routine basis;

reduction in the cost of research; a greater flexibility to alter conditions and variables of the experimental protocol; reduction of error stemming from interindividual variability; and the intrinsic potential of in vitro techniques to study cellular and molecular mechanisms.

Disadvantages include the reduced ability to study organismal growth processes; cells, tissues and organs acting in concert; integrated biochemical and metabolic pathways; behavior; recovery of damaged tissue; interaction between the organism and its environment; idiosyncratic or species specific responses; and the ability to distinquish between male and female specific phenomena.

OTA reports that NIH "regards experimentation involving animals as both a legislative mandate and a moral imperative. Because biomedical research is society's only realistic hope for significant and long lasting improvements in human health, they believe that scientists need to use laboratory animals." NIH does not currently "envision how the substantial momentum of current efforts to improve human health can be maintained or increased without continued reliance on experimentation with animals."

The report emphasizes, however, that "even if animals cannot be replaced in certain experiments, researchers can attempt to reduce the number used and also to minimize pain and distress."

Animal use can be modified in a number of ways, "including strengthening experimental design to use fewer animals, reducing the degree of experimental insult, and substituting one organism for another," it advises. "In the case of substitution, cold blooded vertebrates may supplant warm blooded ones."

In addition, fewer animals could be used in an experiment by sharing a control group with other investigators or by not using a concurrent control group, OTA suggests.

Investigators can also share animals or their tissues. For example, endocrinology researchers and researchers in the molecular genetics of heme synthesis at the Univ. of Virginia "use the pituitaries and livers of the same rats even though the two departments are on opposite sides of the campus." Animals may also be shared among different sites. The Primate Research Institute of New Mexico State Univ. loans chimpanzees and rhesus and cynomolgus monkeys to qualified U.S. scientists.

Discussing the use of living systems in biomedical research, OTA cites the example of organ culture. "In recent years, improved techniques, such as the availability of artificial blood media, have increased the probability of successful organ culture. Blood, or artificial blood media, can be pumped through the organ to sustain it ('perfusion')." Current applications of organ perfusion include the use of human placentas in toxicology studies, "with additional potential for use in oncology and gerontology research."

"The outright replacement of animals with nonanimal methods in research is not at hand, and because of the nature of biomedical and behavioral research, in many instances it is not likely to become feasible," OTA says.

Although a reduction in the numbers of animals used is a principal alternative, OTA reports that data currently available on animal use are very poor, and that any estimate of the numbers of animals used is a rough approximation. The best available data "suggest a minimum of 17 to 22 million animals are used annually" in the U.S. That figure includes 12 to 15 million rats and mice.

The 400 page report was prepared at the request of Senate Labor & Human Resources Chairman Orrin Hatch. The senator sponsored the Health Research Extension Act of 1985 and the Health Professions Training Act of 1985, both of which contain animal research measures. The laws require institutions to have an animal care committee; to provide animal care training for all personnel who use animals in research; and to consider and continually develop the use of alternatives whenever and wherever appropriate.

Hatch asked OTA to prepare the report when the use of animals in research surfaced as a major issue during the development of NIH reauthorization legislation in 1983. The report was prepared by an 18 member advisory panel and 144 reviewers.

OTA identifies seven policy issues that Congress might address: encouraging the adoption of currently available alternatives; promoting research and development on more and better alternatives; disseminating information; restricting the use of animals; providing better estimates of the numbers of animals used; establishing a minimum policy for animal use within federal agencies; and changing impelementation of or amending the Animal Welfare Act.

It also provides a list of possible options for action. Congress can promote alternatives to animal research by providing incentives through tax policies, authorizing grants, or providing educational assistance; by mandating the adoption or development of alternatives by means of legislation; and by providing encouragement via oversight or resolutions.

In addition to discussing policy issues, and options for Congressional action, the report examines patterns of animal use, and the ethical considerations of animals in research. It also explores the use of and alternatives to animals in testing and education as well as research.

Chapters are also devoted to information resources and computer systens; economic considerations; public and private funding toward the development of alternatives; federal regulation and state regulation of animal use. The report also examines institutional and self regulation of animal use and the regulation of animal use in selected foreign countries.

Copies of the report are available from the U.S. Government Printing Office, (GPO), Superintendent of Documents, Washington, D.C. 20402. The GPO stock number is 052-003-01012-7; the price is $16.

NIH TO SPONSOR WORKSHOPS ON ANIMAL CARE AND HUMAN SUBJECT PROTECTION

NIH will sponsor regional workshops on implementing the revised PHS policy on the humane care and use of laboratory animals by awardee institutions. The current schedule includes: March 11, Little Rock, Arkansas, contact Ms. Kathleen Masterson, Univ. of Arkansas Medical Cntr., Mail Slot 636, Little Rock, Ar 77205, phone 501-661-5502; April 4 in Boston, contact Mrs. Virginia Werwath, Harvard Medical School, NERPRC, One Pine Hill Dr., Southborough, Ma 01772, phone 617-481-0400 ext. 202; and May 8 in Atlanta, contact Dr. M.S. Silberman, Emory Univ., Robert Woodruff Health Sciences Ctr., P.O. Drawer KK, Atlanta, Ga. 30322, phone 404-321-0111 ext. 4388 or 4389.

NIH and FDA will sponsor regional workshops on the protection of human subjects to be held Feb. 27-28, March 1 at the Lovelace Medical Foundation in Albugquegue, N.M., contact Pat Johnson or Ann Armijo at 505-262-7415; March 12 at the Univ. of Arkansas Medical Center in Little Rock, contact Ms. Kathleen Masterson, address above; and May 15-16 at the Fred Hutchinson Cancer Research Center in Seattle, contact Susan Charrier at 206-467-4867.

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 NCI-CB-61014-55
Title: Human tumor cell bank for diagnostic studies
Deadline: March 14

One five year contract is anticipated.

NCI is seeking an organization with the technical capabilities and interest in continuing the maintenance of a human tumor cell line bank, which carries approximately 130 cell lines of various neoplasms and distributes samples useful for research in cancer diagnosis, to investigators throughout the United States and abroad.

The organization must have the following: (1) experience and demonstrated proficiency in maintaining tumor cells in tissue culture, (2) the ability to freeze and retrieve viable tumor cells, (3) the expertise for characterization of established cell lines of human tumors and for sensitive detection of mycoplasma and other possible contaminants, (4) adequate space and equipment to maintain the proposed resource, and (5) the ability to maintain a computerized data base that contains clinical information related to each cell line.

Contract Specialist: Mary McGarvey
RCB Blair Bldg Rm 114
301-427-8888

RFP NCI-CO-64082-36
Title: Management Information Systems Support Systems
Deadline: Approximately March 25

The contractor will be expected to provide computer programming, system documentation, procedure development and operational support for the expansion, maintenance, and operation of NCI's management information system. Offerors must possess interactive terminals, word processors or microcomputers that emulate ASCII terminals that provide access to the Div. of Computer Research and Technology, NIH computer, also, to possess an IBM PC/XT or compatible with Lotus 1-2-3, Telios and dBassell. A 3270 compatible device for dialup access using SNA/SDLC communications protocol and a functional equivalent of a Bell Telephone 208B modem will also be required. Offerors must be able to meet with the project officer within two hours of notification and deliver products in less than 24 hours total time. Special personnel requirements are listed in the solicitation.

The incumbent is System Sciences.

Contract Specialist: Patricia Rainey
RCB Blair Bldg Rm 314
301-427-8745

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