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SBIR: A SURE FIRE WAY TO GET FUNDED IN A YEAR WHEN APPLICATIONS SCORING OVER 158 ARE BEING DROPPED

At a time when the payline for grants is a priority score of 158, and when only about 20 per cent of approved grants will be funded, NCI executives are amazed and frustrated over the failure of the scientific community to take advantage of the one sure fire mechanism which all but guarantees that all approved applicants will get their money. Crying the blues because your grant scored 163 and you face

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In Brief

NIH APPEALS BOARD RESTORES NASSAU CCOP FUNDING, PI SAYS IT IS NOW MEETING PATIENT ACCRUAL GOAL

NASSAU COMMUNITY Clinical Oncology Program has been restored to the list of funded CCOPs by the NIH Grants Appeals Board. The board supported Nassau's appeal of NCI's decision not to fund Nassau for a second year as a CCOP, directing NCI to place Nassau on probationary status for no less than six months with full funding. The Mineola, N.Y. CCOP had been denied second year funding, one of two out of 62 CCOPs not recommended for further funding by NCI staff (**The Cancer Letter**, Aug. 31). The decision resulted from slow patient accrual. Nassau had committed itself to place 50 patients on protocol during the first year, but had achieved only about one fourth of that when the award was suspended. Larry Nathanson, director of the Div. of Oncology-Hematology and principal investigator for the CCOP, said last week that between Sept. 15, 1984 and Jan. 21, 1985, 14 additional patients had been placed on Cancer & Leukemia Group B and Gastro-Intestinal Tumor Study Group protocols."Thus it would appear that our performance on this grant is improving markedly, and we have hopes of achieving approximately the stated goal of 50 patients per year in the current grant year, Sept. 15, 1984 through Sept. 14, 1985," Nathanson said.... **KARL ZIMMERMAN**, deputy contracting officer for NCI at Frederick Cancer Research Facility for the past 11 years, has retired after 39 years government service.... **WILLIAM LANZER**, Univ. of Washington surgeon-scientist, has received a Zimmer Research Award from the Orthopaedic Research & Education Foundtion. Lanzer will study the biochemical characterization of the human growth plate in development and neoplasia. The Zimmer Awards are funded by a grant from Bistol-Myers Co. Zimmer 1985 Departmental Awards have been made to Cleveland Clinic Foundation, Louisiana State Univ., Rhode Island Hospital, Univ. of Southern California, Univ. of South Florida and Univ. of Tennessee (Chattanooga).... **NCI DIET**, Nutrition & Cancer 1983 status report is available free from Capital Systems Group, phone 301-881-9400. The report summarizes nutrition related research supported by NCI and describes future research directions.

NCI HAS OBLIGATED ONLY $1.7 MILLION OF $9.2 MILLION SET ASIDE FOR SBIR

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going unfunded unless Congress forces the Administration to restore those 1,500 grants OMB cut from NIH? Here's a program which pays all grants right up to a score of 500, the worst possible score in the NIH system, as long as the money allocated to the program holds out. And right now, there seems to be little danger that the money will run out before the applications do, at least at NCI.

This is the Small Business Innovation Research Program. So far, the scientific community has not made much of an effort to take advantage of it, probably because most scientists are turned off by the "small business" tag. In fact, just about any researcher can qualify, by affiliating with a commercial firm which fits the parameters set out by the federal government for small businesses.

"I don't understand why grantees, who are in such dire straights, aren't flocking to this," Div. of Cancer Treatment Director Bruce Chabner commented to his Board of Scientific Counselors last week. "I want to emphasize that a small business can be an individual, he can be a post doctoral fellow in your lab. If he affiliates with a company, through a subcontract he can do a substantial portion of the work."

The law required NCI to set aside $9.2 million for the SBIR program in the 1985 fiscal year. So far, if all the applications approved are funded at their maximum, only $1.75 million will be used. Without further grants or contracts to draw against the balance, it will revert to the U.S. Treasurery.

The program awards grants and contracts in two phases. Phase 1 is a six month planning effort, with a maximum award of $50,000. Phase 2 awards are for two years and up to $500,000 each, with some provisions for extensions.

The research is supposed to be aimed at development of products with commercial potential. That may not be as limiting in scope as some in academia might think. Following are lists of projects NCI and its advisors developed which they are more than eager to support through SBIR:

Cancer Biology and Diagnosis

A. Hybridoma technology—improvements of the methologies involved in fusion, production of novel cells as fusion partners, selection and assay of antibody producing clones and production of new and useful monoclonal antibodies.

B. Genetic engineering technology, including the development of useful DNA probes, new restriction enzymes, improvement in the technology to quantitatively and qualitatively identify the reactivity DNA probes. Improvement of techniques to transfer and insert DNA segments.

C. Development of new techniques to evaluate chromosome alterations in neoplastic and in normal mammalian cells.

D. Biomedical engineering to develop immoblized forms of biologically active molecules on inert matrices, timed release of biologically active molecules and site specific release of biologically active molecules.

E. Development of in vivo model systems such as new genetic strains of animals, especially with mutations that parallel human disease.

F. High resolution analytical tools of machinery to measure enzyme levels, metabolic concentrations or other critical molecules in single cells.

G. Development of new media, new growth matrices and new culture and incubation techniques for cultivating specific cell types and for large volume yields.

H. Development of in vitro model systems that express unique genetic properties, specific metastatic characteristics, different degrees of differentiation, etc.

I. Development or improvement of testing automated or semiautomated systems in high resolution image analysis and low resolution or flow system for single cell analysis and cell sorting.

J. Development and evaluation of biochemical and hormonal markers for differential diagnosis of cancerous and precancerous conditions in tumor extracts and in blood, serum, urine and other biological fluids.

K. Cell identification technology—development and/or evaluation of specific cellular markers for identification of abnormal cells and assessment of prognosis and monitoring of disease. Markers include flourescent dyes, cell surface and nuclear antigens, modified nucleosides and fluorescent enzyme substrate, etc.

L. Cell tracer technology—the development and refinement of methodologies that allow the tracking and status determination of cells after in vivo administration.

M. Application of biochemical, immunological, immunohistochemical, and physical-chemical studies of isolated tumor antigents for improved diagnosis.

N. Cell separation technology—development and assessment of single cell disaggregation from tumor masses.

O. Delineation of biochemical, immunologic, genetic, enzymatic, and hormonal differences between malignant, benign, and normal tissues and cells for improved classification of human tumors and for high risk assessment.

P. Development and evaluation of radiolabeled

monoclonal antibodies to be used in tumor radioimmunodetection.

Cancer Cause and Prevention

A. Biometric methodology and software, e.g., the development of mathematical models relevant to cancer biology; statistical techniques for use in evaluating the effects of potential carcinogens; means of evaluating the effects of patient characteristics on survival analysis or the analysis of competing risks; techniques for evaluation of cancer screening tests and procedures; or improved methodologies for evaluating cancer risk from low dose exposure to carcinogens.

B. Specific cancer related hybridomas or monoclonal antibodies.

C. Methods of food preparation or processing which reduce or eliminate carcinogen/mutagen content.

D. Methods for the detection of biological markers of human exposure or nutritional status for use in epidemiologic studies.

E. Synthetic methods for the production of carcinogens, anticarcinogens or their metabolites needed in research investigations.

Cancer Treatment

A. Cancer and nutrition—research to improve the methodology of nutritional assessment in a cancer population.

B. Clinical treatment research. (1) Develop methods for the analysis of results of clinical trials or for the management of clinical trials data. (2) Develop and characterize novel chemical compounds that may be useful anticancer agents, either alone or in combination with other modalities such as radiotherapy. (3) Develop techniques to lessen the toxicity of existing anticancer treatments. (4) Develop and refine techniques, either in vitro or in vivo, for the screening of active anticancer agents. (5) Develop new techniques for the delivery of anticancer agents which will maximize therapeutic effects and minimize toxicity.

C. Biochemistry and pharmacology. (1) Drug synthesis—design and synthesis of novel compounds for evaluation as potential anticancer agents. (2) Drug evaluation and screening. Conduct research on specialized small animal toxicity testing; develop techniques for screening against human tumor cell lines and assess feasibility for use as ancillary prescreens; develop improved systems for delivery of high priority drugs to small animals; develop and use techniques for identifying enzyme binding characteristics of selected drugs; develop batteries of human cell lines resistant to major classes of clinical agents and establish their utility in drug evaluation. (3) Pharmaceutical development. Develop new methods to improve drug solubility for subsequent intravenous administration; develop new approaches for the selective delivery of antitumor agents; develop bioavailable alternatives to the intravenous delivery of cytotoxic chemotherapy; develop improved methods to reduce thrombophlebitis and other related side effects observed following intravenous injection of some anticancer drugs. (4) Toxicology. Develop biochemical response profiles on specific target organs to permit rapid identification of toxic effects due to antineoplastic drug administration; develop in vivo tests for estimation and prediction of neurotoxicity; identify toxic effects of drugs by characterizing reactions with biomolecules or receptors; develop in vitro tests to detect, qualify and quantify toxic effects of antineoplastic drugs; develop human somatic cell mutagenesis system. (5) Information technology. Improve appearance of typewriter generated chemical structures, which are distorted by input constraints, and which should be transformed algorithmically so that they can be displayed on graphics terminals or laster printers with quality comparable to print; investigate methods for machine reading of graphics—a serious need exists for a means of generating a computer record from a hard copy chemical structure with no loss of information; develop a distributed data management network for cancer clinical trials; develop a 32 bit microcomputer based data management and analysis system for use by coordinating centers of clinical trials; experiment with procedures whereby the NCI drug development effort could use barcode labeling to aid in different tasks such as user/authority validation and document recognition as well as sample labeling, which is now being done; incorporate stereochemical information into chemical structure connection tables—these currently ignore stereochemical (three dimensional) information which is carried in the form of a comment record, and is thus troublesome to retrieve and use; investigate the possible application of optical character recognition techniques to converting old program records into machine readable records. (6) Animal production and genetics. Investigate alternatives to expensive barrier systems for exclusion of pathogens from rodent colonies, e.g., by use of microisolator cages, and evaluate their performance.

D. Radiation research. (1) Development and initial testing and evaluation of diagnostic imaging systems, including x-ray, radioisotopes, ultrasound, electron and MRI, thermography, microwaves, diaphanography, transmission spectroscopy, laser optics, holography, magnetography, optical imaging, and other potential new methods of producing one, two and three dimensional static and dynamic images. (2) Development and initial testing and evaluation of medical imaging systems and subsystems, including

components for detection, data acquisition, information and image recording, storage, display, projection, processing, analysis, and transmission by wire, optical or radio means; development and evaluation of special materials for use in medical imaging, such as contrast agents, radiopharmaceuticals, sensors, transducers, and materials for detection, switching, and display; computer hardware and software as intrinsic parts of, or adjuncts to, diagnostic imaging systems; diagnostic imaging systems as aids to radiation therapy in defining location, size, shape and distribution of tumors for treatment planning and dosimetry and for visualizing and characterizing tissues and perfusion thereof before, during and following treatments; studies relating to clinical research in radiotherapy using ionizing and nonionizing radiation and related areas in radiobilogy and radiation physics; investigations related to exposures to low doses of ionizing as well as to nonionizing radiations—all categores of studies include investigations at the molecular, cellular, tissue and whole animal levels. (8) Radiation dosimetry systems for radiotherapy to measure the distribution of absorbed dose in vivo and in phantoms. (9) Systems are needed for the three dimensional display of human anatomy as derived from CT, MRI or PET scanners for tumor and normal tissue localization and identification for treatment planning. (10) Noninvasive thermometry devices for accurate measurement of temperature distributions in tumor and normal tissues during hyperthermia treatment. Applicators need to be developed which are capable of uniformly heating various treatment volumes at various depths within the body. (11) New devices or improved fiber optics are needed to increase light penetration of tumor tissue.

The foregoing were intended as possible areas of research for SBIR grant supported projects. Following are possible contract supported projects for which NCI invites proposals:

Laser treatment control devices—Lasers have the potential to remove tumors with precision and minimal blood loss. However, two other potential benefits have not been satisfactorily realized—the ability of lasers to spare normal tissues surrounding the tumor and to minimize scar tissue formation. Research and development are needed to produce devices which precisely control the scope of laser induced tissue destruction. Such devices could control the depth of laser energy and ensure three dimensional regulation of excision.

Contrast agents for magnetic resonance imaging—MRI requires markedly different physical characteristics for contrast agents than those used for x-rays.

Other suggested areas for R&D include development of small cyclotron for isotope production, diagnostic imaging instrument development, development of radioprotective compounds, hyperthermia equipment for heating deep seated tumors, techniques for interstitial hyperthermia, computer controlled multi leafed collimators for radiation treatment acclerator, animal models for studying late radiation effects on normal tissues, monoclonal antibody conjugates for therapy and diagnosis, monoclonal antibody to cell surface markers for drug resistance, characterization of monoclonal antibodies to tumor growth factors and oncogenes, large scale production of human retrovirus and individual structural components and production of high titered polyclonal and monoclonal antobies, novel methods for preparation of monclonal antibody conjugates with toxins for in vivo or ex vivo therapy, monoclonal antibodies directed against cytokines, monoclonal antibodies against human tumor associated antigens and cell receptors, production of tumor cell lines sensitive to specific cytokines, production of detoxified endotoxin, production of genetically engineered cells making cytokines, production of immunoaugmentive agents, liposomes with biological response modifiers for therapy, development of a computerized tracking system for pharmaceutical production and control, synthesis of small and medium size polynucleotides and polypeptides, synthesis of analogs of clinically active anticancer agents, novel drug formulation and delivery systems, development of improved techniques for cloning of human tumor cells in tissue culture systems, development of interactive statistical software to facilitate the use of state of the art methodology in cancer clinical trials, development of portable and extended version of modeling laboratory, chemical synthesis of radiolabeled antitumor agents, in vitro antineoplastic drug toxicology chracterization, library of chromosome lp restriction fragment length polymorphisms, development of user friendly software for implementation of the personal computer, development of methods for biochemical monitoring in epidemiologic studies, compilation and evaluation of retrospective mortality data for record linkage, studies of the collection and storage of human biologic specimens, development of immunologic reagents and enzyme immunoassays to detect specific substances in biological specimens, development of nutrition education materials including computer software which will result in long term adherence to diets thought to reduce cancer risk, development of specific assays and clinical tests for monitoring dietary compliance and nutrient intakes, testing feasibility of specific biochemical, immunological or genetic markers or physical detection techniques for the early detection of cancer, modification of the NCI Drug Information System software for a 32

bit environment, chemopreventive agent synthesis and/or formulation of new or innovative compounds, refinement and evaluation of in vitro and in vivo screening systems to identify new chemopreventive agents, toxicology studies including conventional short term tests, lifetime tests and tests for reproductive toxicology, information resource activities to identify, chracterize and evaluate reports and scientific literature in the area of chemoprevention, and data management systems for monitoring preclinical and clinical progress of studies, agents, supplies and/or materials of importance.

Each of those topics might well be considered an informal RFP or RFA; in fact, the HHS publication in which they are listed repeatedly uses the term, "proposals are solicited for," as would an RFP. These are bonafide solicitations, with stipulated amounts of money available, and almost guaranteed awards for those that are approved by the review committees, for the moment without much regard to priority scores. That first hurdle apparently is the toughest—review committees, aware that the paucity of applications means everything is being funded, are being somewhat stricter than usual in approving them.

The publications, "Solicitation of the Public Health Service for Small Business Innovation Research Contract Proposals," and "Omnibus Solicitation of the Public Health Service for Small Business Innovation Research Grant Proposals" are available from NIH and NCI. They include more details on individual project solicitations than are given here. The deadline for contract proposals is April 1, and for the last round of grant proposals which may be funded with 1985 fiscal year money, April 15. Those interested in submitting proposals are urged to contact immediately one of the individuals listed below:

Lily Engstrom, SBIR Program Coordinator, NIH, Bldg 31 Rm 1B54, Bethesda, Md. 20205, phone 301-496-1968; Dr. Vincent Oliverio, NCI, Div. of Extramural Activities, Bldg 31 Rm 10A03, 301-496-4218; Louis Greenberg, Div. of Cancer Biology & Diagnosis, Westwood Bldg Rm 10A10, 301-496-5307; Dr. John Cooper, Div. of Cancer Etiology, Landow Bldg Rm 8C41, 301-496-1882; Dr. Gregory Curt, Div. of Cancer Treatment, Bldg 31 Rm 3A49, 301-496-6711; and Dr. Richard Costlow, Div. of Cancer Prevention & Control, Blair Bldg Rm 632B, 301-427-8648.

MASSIVE OPPOSITION BUILDING TO OMB CUTS; LEGISLATIVE, COURT MOVES SEEN

Securing $8-9 million for the Cancer Program through the Small Business Innovation Research Awards which otherwise will revert to the Treasurery may seem like small potatoes compared with the massive cuts in NCI's 1985 and 1986 budgets imposed by the White House. The decree by the White House Office of Management & Budget that 1,500 NIH new and competing grants planned for award in FY 1985 be funded for three years with 1985 money in effect cuts $48 million from NCI's budget this year. And the President's budget request for FY 1986 slashes NCI's total by $64 million under 1985 spending. If those cuts stand, the $8 million still available through SBIR is more crucial than ever.

Massive opposition to those actions has been building in the scientific community. Congressional offices are still trying to determine what response they can make, especially to the forward funding ploy. That has an immediate effect, on institutions and grantees with applications in the priority score range which would have been funded if the intent of Congress had not been ignored—those with scores from 159 to 170-175. First reaction was that OMB's action, while clearly contrary to congressional intent, did not violate the anti-impoundment law and thus was legal. However, some members of Congress and their legal advisors feel that the courts may well consider "intent of Congress" in this case as having the full force and effect of law. There was talk this week that one or more members of Congress, or one or more of the newly deprived prospective grantees, might seek an injunction forcing OMB to permit paying of those grants. That could give Congress time to deal with the matter legislatively, probably through the 1986 appropriations bills.

NCI's advisors got into the fray last week when the Div. of Cancer Treatment Board of Scientific Counselors approved the following statement:

"In an era when the importance of science to the short and long term progress of the nation is beyond dispute, the Board of Scientific Counselors is distressed to learn of the action by OMB to reduce to 5,000 the 6,500 NIH grant awards that Congress had approved, and the President endorsed. The effect of this reduction will be to reduce significantly the number of high caliber research initiatives that can be pursued by the biomedical scientists of this country. A blanket reduction in the number of grants grossly subverts the intent of Congress, cripples the national cancer research effort, and effectively reduces science policy and science planning to purely fiscal management. This reduction occurs at a time when biotechnology is providing us with dramtic new insights in the etiology, diagnosis and treatment of cancer. Cutting back on the basic research that funds these advances subverts the mission of the National Cancer Institute. As others have noted, it is the research base of this country that generates the concepts that lead to practical clinical advances and important commercial

developments in biomedicine. Erosion of this base will have devastating effects on all aspects of our efforts to conquer cancer."

Congressman Henry Waxman (D.-Calif.), chairman of the House Health Subcommittee, introduced a joint resolution which he said "will reverse the Office of Management & Budget's arbitrary cut in research for the National Institutes of Health. At issue is not only maintaining support for the world's pre-eminent biomedical research institution, but also the prerogative of the Congress to assure that the laws it writes are properly administered."

OMB's action, Waxman said, "is arbitrary and a blatant violation of the intent of Congress." Both House and Senate Appropriations Committees made it clear that between 6,200 and 6,850 new and competing grants were to be funded with FY 1985 appropriations, Waxman contended. "There is no ambiguity on this subject. NIH properly implemented the law and announced the availability of approximately 6,500 new and competing awards in the current fiscal year." The OMB order freezing the number at 5,000 "is cavalier and totally unacceptable. The signal OMB has sent researchers... The message communicated about this Administration's priorities in research is unmistakable and should concern, if not frighten, every American."

Waxman noted that the President's request for NIH in the 1986 budget is a $300 million cut from 1985. "Combined with OMB's attempt to reduce the NIH support for basic research, the budget is an unprecedented reduction. It incidates the Administration's willingness to surrender this nation's world leadership in the health sciences."

Waxman said that his House Joint Resolution 136 "proposes to set the record straight. The resolution states in clear, unmistakable terms that Congress' commitment to assure that its legislative intent is followed and the public's support of NIH and its vital research mission is recognized.

"Passage of this resolution will assure the public that the nation's commitment to NIH is unwaivering and that our investment in better understanding the mechanisms of disease will continue to yield impressive dividends. I believe the opportunities before us are vast and the potential for major breakthroughs has never been better."

The resolution describes the OMB action, notes that it is "in direct contravention of congressional intent as reflected in the House and Senate committee reports accompanying the bills leading to Public Law 98-619 (the HHS appropriations legislation). . . and will have a seriously disruptive impact on the nation;s research capacity and may result in the closing of numerous research laboratories." The resolution directs the Administration to use the FY 1985 appropriations to fund 6,500 new and competing research grants this year.

NCI has always been sensitive to criticism about the relative budgets of the intramural and extramural programs, especially when the grants pool suffers as it is now. The staff pointed out that the research program (grants) pool increased 44 per cent from 1980 to 1985, including the new reductions. During the same period, the intramural program grew by 28 per cent.

The grants pool fared even better, relatively speaking, between 1984 and 1985 when it went up 5.1 per cent. The intramural program increased only 1.4 per cent in that year.

Dates for the House and Senate hearings on the FY 1986 budget for NCI have been scheduled. The House Labor-HHS Appropriations Subcommittee, chaired by William Natcher (D.-Ky.) will hear the NCI budget March 11, 2 p.m., in Rm 2358 of the Rayburn Bldg. The Senate Labor-HHS Appropriations Subcommittee, chaired by Lowell Weicker (R.-Conn.) will have its hearing March 19, 9 a.m., Rm 116, Dirksen Bldg.

NCI ADVISORY GROUP, OTHER CANCER MEETINGS FOR MARCH, APRIL, FUTURE

Continuous Infusion Chemotherapy--March 1, Brussels. EORTC symposium. Contact D. Eeckhoudt, address above.

Cancer and the Elderly--March 1-2, Sheraton-Palace Hotel, San Francisco. 20th annual San Francisco Cancer Symposium. Contact West Coast Cancer Foundation, 50 Francisco St., Suite 200, San Francisco 94133.

Chromosomes in Solid Tumors--March 3-5, Arizona Cancer Center, Tucson. International workshop. Contact Mary Humphrey, Conference Coordinator, Arizona Cancer Center, Tucson 85724, phone 602-626-6044.

Clinical Trials Contract Review Committee--March 4, NIH Bldg 31 Rm 9, open 8:30-9 am.

International Conference on Cancer Therapy Trials--March 4-10, Melbourne, Australia. Contact Dr. John Forbes or Dr. John Levi, Box 29, Parkville, Victoria 3052, Australia.

Treatment of Cancer in the Neck--March 6-8, Houston. Clinical symposium. Contact M.D. Anderson Hospital, 6723 Bertner Ave., Houston 77030, phone 713-961-9300.

Second World Congress on Cancers of the Skin--March 7-9, New York. Contact Skin Cancer Foundation, 475 Park Ave. South, New York 10016.

Infusional Chemotherapy and Bone Marrow Transplantation--March 7-8, Boston. Contact Gwen Schuster, Dept. of Continuing Education, Harvard Medical School, phone 617-732-1525.

Computers and Data Bases in the Private Physician's Office--March 8, Roswell Park continuing education in oncology. Contact Gayle Bersani, Coordinator of Continuing Education, RPMI, 666 Elm St., Buffalo,

N.Y. 14263, phone 716-845-2339.

Hematologic Malignancies—March 9-16, Snowbird, Utah. 4th winter symposium. Contact Dr. Stephen Jones, Section of Hematology & Oncology, Univ. of Arizona Cancer Center, Tucson 85724.

Fundamental Tumor Registry Operations—March 11-15, Good Samaritan Hospital, Lexington, Ky. American College of Surgeons program. Contact Constance Fulmer, PhD, phone 606-252-6612.

Oncology: Surviving the 80s--March 13-17, Capitol Hill Hyatt Regency Hotel, Washington D.C. Assn. of Community Cancer Centers 11th national meeting. Contact ACCC, 11600 Nebel St. Suite 201, Rockville, Md. 20852, phone 301-984-9496.

Current Approaches in Radiation Oncology--March 13-15, San Francisco. Contact Crest International, 940 Emmett Ave., #14, Belmont, Ca. 94002.

Advances in Leukemia and Lymphomas—March 14-16, MGM Grand Hotel, Las Vegas. First National Symposium of the Leukemia Society of America. Contact LSA Medical Conference, Bostrom Corp., 435 N. Michigan Ave., Suite 1717, Chicago 60611.

Current Cancer Research: Springboards for the Future—March 21-22, Chapel Hill, N.C. 9th annual Lineberger Cancer Research Center symposium. Contact Pam Upchurch, Lineberger Cancer Research Center, UNC-CH, Chapel Hill 27514.

Society for Magnetic Resonance Imaging--March 22-26, Town & Country Hotel, San Diego. 3rd annual meeting. Contact Ronald Ross, M.D., Radiologic Medical Imaging Associates, Fox Run, Gates Mills, Ohio 44040, phone 216-461-5144.

International Assn. for Breast Cancer Research--March 24-27, London. Biennial International Breast Cancer Research Conference. Contact Dr. Marvin Rich, AMC Cancer Research Center, 6401 W. Colfax Ave., Lakewood, Colo. 80214, phone 303-233-6501.

Clinical Cancer Program Project Review Committee—March 28-29, Holliday Inn, Bethesda, Md., open March 28, 8:30-10 a.m.

Treatment of Pain in Chronic Diseases--April 1-3, San Diego. Contact Larry Smith, St. David's Community Hospital, 919 E. 32nd St., Austin, Texas 78765, phone 512-397-4264.

Conference on Polyribonucleotides for Cancer Therapy--April 4, Lister Hill Auditorium, NIH. Contact Carole Kirby, Biological Response Modifiers Program, DCT, NCI, Frederick Cancer Research Facility, Bldg 567 Rm 129, Frederick, Md. 21701, phone 301-695-1418.

Biochemical and Molelcular Epidemiology of Cancer—April 6-12, Steamboat Springs, Colo. Contact UCLA Symposium, Molelcular Biology Institute, Los Angeles 90024.

Fifth Congress of the Circulo de Radioterapeutas, Ibero-Latinomaricanos—April 7-12, Miami. Contact Dr. Mario Vuksanovic, Mercy Hospital, Dept. of Radiology, 36635 Miamia Ave., Miami, Fla. 33133.

Papilloma Viruses: Molecular and Clinical Aspects—April 8-14, Steamboat Springs. Contact UCLA Symposium, address above.

Smoking and the Workplace--April 9-11, Capitol Holiday Inn, Washington D.C. Contact Society for Occupational & Environmental Health, 2021 K St. NW, Suite 305, Washington D.C. 20006.

Diagnosis & Treatment of Neoplastic Disorders—April 11-12, Johns Hopkins Medical Institutions. Contact Program Coordinator, Turner Auditorium Rm 22, 720 Rutland Ave., Baltimore 21205, phone 301-955-6046.

Time Related Factors in Cancer Epidemiology—April 15-17, NIH Bldg 1 Wilson Hall, 8:30 a.m.-5 p.m. each day. Epidemiologic, statistical and biological issues in cancer risk assessment. Contact Society for Occupational & Environmental Health, address above, or Dr. Ken Chu, Program Director, Occupational Cancer Branch, Div. of Cancer Prevention & Control, NCI, Bethesda 20205, phone 301-427-8633.

Leukemia Society of America Regional Meeting—April 18-20, Marriott Copley Place Hotel, Boston. Contact LSA, 733 Third Ave., New York 10017, phone 212-573-8484.

Frontiers in Oncology--April 20, Alta Bates Hospital, Berkeley, Calif. For oncologists and primary care physicians. Contact Alta Bates Medical Education Dept., 3001 Colby St., Berkeley 94705, phone 415-540-1420.

International Neutron Therapy Workshop: Brachy vs. Beam Therapy—April 21-24, Hyatt Regency Hotel, Lexington, Ky. Contact Marilyn Smith, Dept. Radiation Medicine, Univ. of Kentucky Medical Center, 800 Rose, Lexington 40536, phone 606-233-6901.

Fundamental Tumor Registry Operations—April 22-26, Lourdes Hospital, Binghamton, N.Y. Contact Bud Rogers, Administrator, 169 Riverside Dr., Binghamton 13905, phone 607-798-5431.

Exploring the Future of Cancer Care--April 24, Hilton Hotel, Pasadena, Calif. USC medical symposium. Contact Linda Richie-Walker, Cancer Management Network, 1721 Griffin Ave., Phinney Hall Rm 205, Los Angeles 90031, phone 213-224-7368.

Combination of Modalities & Limb Salvage in Soft Tissue Sarcomas—April 25, Roswell Park continuing education in oncology.

American Radium Society—April 27-May 1, Acapulco. 67th annual meeting. Contact Suzanne Bohn, Executive Secretary, ARS, 925 Chestnut St., Philadelphia 19107.

National Toxicology Program Board of Scientific Counselors—April 30-May 1, Research Triangle Park, N.C., National Institute of Environmental Health Sciences.

FUTURE MEETINGS

National Tumor Registrars Assn.--May 7-10, Hotel Queen Mary, Long Beach, Calif. 1985 annual meeting. Contact Cynthia Creech, Cancer Program Manager, Huntington Memorial Hospital, 100 Congress St., Pasadena, Calif. 91105, phone 818-440-5186.

NIH Technology Assessment Meeting on Registries for Bone Marrow Transplantation--May 13-15, Masur Auditorium, NIH, Bethesda, Md. Contact Peter Murphy, Prospect Associates, Suite 401, 2115 E. Jefferson St., Rockville, Md. 20852, phone 301-468-6555.

Breast Preservation--June 14-15, New York City. Workshop on techniques of conservative surgery and radiotherapy for early breast cancer. Contact CME Conference Planning Office, C-180, Memorial Sloan-Kettering Cancer Center, 1275 York Ave., New

York 10021, phone 212-794-6754.

Diet, Nutrition and Cancer--Sept. 5-7, Shamrock Hilton Hotel, Houston. Second national conference. Contact American Cancer Society, 90 Park Ave., New York 10016.

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-CP-51020-64
Title: Biological Carcinogenesis Branch repository for storage and distribution of research resources.
Deadline: Approximately April 6

This procurement is 100 per cent set aside for small businesses.

NCI has a requirement for a contractor, located within one hour driving time from NIH in Bethesda, capable of functioning as a repository and distribution center for various biological reagents and possessing the following capabilities: (1) a minimum of 3,500 sq. ft. of dedicated floor space for low temperature storage of specially developed biological reagents and clinical specimens; (2) ability to supply electrical power to accommodate approximately 40 government owned refrigerator/freezer units; (3) ability to supply liquid nitrogen to 18 nitrogen freezers; (4) availability of standby facilities in event of loss of refrigeration capacity; (5) security maintenance of all storage facilities and continuous monitored central temperature alarm system for all refrigerator/freezers; (6) capability to house and operate a government provided IBM/PC/AT and its ancillary software to maintain an on line inventory for biological reagents; (7) capability of operating a reimbursement accounting system whereby recipients of biologics are billed for materials and shipping costs by the repository contractor. These payments are subtracted from the costs of operating the repository and are so indicated on vouchers submitted to the government for payment.

The concept from which this RFP was derived was approved by the Div. of Cancer Etiology Board of Scientific Counselors at its fall meeting and reported in the Nov. 23 issue of The Cancer Letter, page 5.

Contracting Officer: Zaiga Tums
RCB Blair Bldg Rm 114
301-427-8888

RFP NCI-CP-EB-51026-21
Title: Case control satudy of cancer and drinking water contaminants
Deadline: Approximately April 11

The Environmental Studies Section of the Environmental Epidemiology Branch of NCI's Div. of Cancer Etiology is planning a population based case control study, using mailed quesionnaires, of incident cancers of the colon, rectum, bladder, brain, pancreas, liver and kidney that occur within a defined geographic area. The primary focus will be on the evaluation of hypotheses concerning the relationship of chlorination byproducts and other contaminants in drinking water with risk of these cancers. An adjunct environmental survey of drinking water quality will also be conducted under this contract. Samples of treated drinking water from community water supplies in the study area will be collected and analyzed for levels of trihalomethanes, other selected volatile organics, nitrates, pesticide residues and possibly other contaminants.

The contractor will collaborate with the NCI project officer in designing data collection forms, developing the study protocols and in designing a water sampling strategy. The major responsibilities of the contractor will concern the execution of all field aspects of the study. The contracting organization's primary orientation should be toward the design, conduct, analysis and publication of results from epidemiologic studies. In particular, the contracting organization must be highly experienced in the conduct of all phases of case control and demographic studies of cancer and water quality.

The contracting organization must be located at the study site. There must be a population based tumor registry or alternate means of identifying all newly diagnosed cancer cases of interest in the study area. Information on historical water source and treatment, dating back to 1920 or before, must be readily available.

It is anticipated that a multiyear, cost reimbursement, incrementally funded, completion type contract will be awarded for a period of three years. Award is anticipated for September, 1985.

The concept from which this RFP was derived was approved by the DCE Board of Scientific Counselors last fall and reported in the Nov. 9 issue of The Cancer Letter, page 3.

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