

OCT 27 1989

THE

# CANCER LETTER

P.O. Box 15189 WASHINGTON, D.C. 20003 TELEPHONE 202-543-7665

Vol. 15 No. 41

Oct. 27, 1989

© Copyright 1989 Cancer Letter Inc.  
Price \$185 Per Year North America  
\$200 Per Year Elsewhere

## Congress Agrees On Jackson Lab Support, But Does Not Add Money; Earmarks Hit NCI Budget

House and Senate conferees on the HHS-Labor-Education appropriations bill decided that biomedical research does need a new animal production facility to replace the Jackson Laboratory building destroyed by fire last May. However, the funding for the project will not be a new appropriation, as  
(Continued to page 2)

### In Brief

## Bogardus Heads ASTRO, Million President Elect; Woods Named Chief Of NCI Contracts Review

AMERICAN SOCIETY for Therapeutic Radiology & Oncology installed new officers for 1989-90: President, Carl Bogardus, Univ. of Oklahoma; president elect, Rodney Million, Univ. of Florida; chairman, Stanley Order, Johns Hopkins Univ.; secretary, Frank Wilson, Medical College of Wisconsin; treasurer, Lawrence White, Winchester Medical Center; and members at large, Marvin Rotman, State Univ. of New York (Brooklyn); Sarah Donaldson, Stanford Univ.; Lester Peters, Univ. of Texas M.D. Anderson; Eli Glatstein, chief of NCI's Radiation Oncology Branch. . . . WILNA WOODS has been appointed chief of the Contracts Review Branch in NCI's Div. of Extramural Activities. She replaces David Jofte, who has retired. Woods has been executive secretary of the Cancer Biology & Immunology Contracts Review Committee. . . .

JAMES GLENN has been appointed executive director of the Lucille Parker Markey Cancer Center. Glenn, former president of Mt. Sinai Medical Center, has been on the faculty of the Univ. of Kentucky College of Medicine. Gilbert Friedell, director of the Markey Cancer Center, is on sabbatical. He will continue as administrator of the Kentucky Cancer Program, formerly known as the McDowell Cancer Network. A search committee has been appointed to select a new center director. . . . AMERICAN CANCER Society named William McGuire, Univ. of Texas Health Science Center, and James Fisher, Yale Univ., as ACS Clinical Research Professors. . .

BRUCE SPIEGELMAN of Dana-Farber Cancer Institute was awarded the second annual Claire and Richard Morse Research Award, for his research on adipisin, a fat cell protein deficient in several forms of obesity, and similar to an immune system protein. . . . ROBERT PARKER, UCLA chairman of radiation oncology, received the ASTRO Gold Medal Award at the society's annual meeting for his "outstanding contributions to the development of therapeutic radiology and oncology."

RO1 Grants Pool,  
New Investigators  
Hit By Budget Strains

. . . Page 3

DCT Board Approves  
New Imaging Study  
In Split Vote,  
Small Grant Program

. . . Page 5

Harold Amos Receives  
Drew Medical Prize

. . . Page 4

NCI Advisory Group,  
Other Cancer Meetings

. . . Page 7

RFPs Available,  
NCI Contract Awards

. . . Page 8

## \$15 Million For New Animal Facility To Be Sliced From NCI, NHLBI, NEI

(Continued from page 1)

as Jackson Laboratory officials and supporters, and NIH, had hoped. Instead, conferees directed NIH to take the money from the amounts in the bill allocated to three institutes: NCI, National Heart, Lung & Blood Institute, and National Eye Institute.

The conference report was not completely clear on where the money would come from, but those three institutes are the only ones with extramural construction grant authority. There is some speculation that a way will be found to spread the cost around all of NIH, since all institutes are affected to some degree by the Jackson situation.

The conference committee also limited the government's share to \$15 million. Jackson Lab officials had estimated it would cost \$25 million to replace the facility.

The construction funding will be awarded through normal peer review. Although Jackson Laboratory is generally considered the premier mouse production and research laboratory in the world, other organizations have expressed interest in competing for the funds.

Who will manage the program also is unclear. NCI has the most experience in managing extramural construction grants, but its Research Facilities Branch will have only a secretary with the departure next week of Branch Chief Donald Fox.

The 1990 fiscal year will be difficult for NCI even if it receives the entire \$1.664 billion agreed upon by the conferees. It could be much worse. The sequestration required by Gramm-Rudman-Hollings will cut \$86.4 million from NCI's budget if Congress and the President do not work out on an overall

budget for the government this year.

The President's veto last week of the HHS-Labor-Education appropriations bill complicates the situation but probably will not affect the dollar amount NCI will get. The veto was based on the abortion issue and not on the money levels. If the veto is not overridden, a new bill most probably will include the same levels, but with changes in the language on federal funding of some abortions.

The \$1.664 billion for NCI in the bill is an increase of \$94 million above the 1989 level. Most of that extra money will be consumed by earmarks and congressional directives, if in fact NCI does wind up getting that much.

A Senate Appropriations Committee staff member told **The Cancer Letter** this week that the committee considers the report language "binding." The House Appropriations Committee also expects its report directives to be followed. However, NCI and other agencies do not always go along with committee reports, especially when the directive does not appear in the reports of both Senate and House committees, or in the conference committee report.

The Jackson Lab directive came out of the conference committee, as did the earmark of \$34 million to upgrade NCI's supercomputer. The supercomputer money was allocated directly to the NIH director and was not included in the NCI total. Conferees also allocated \$2 million to the NIH director to establish a diagnostic radiology program, an activity now exclusively carried out by NCI.

The Senate report contained four major directives for NCI: \$4 million for pediatric AIDS research; \$900,000 to be added for information dissemination; an unspecified amount to continue funding the same number of cancer center core grants as were funded in 1989; and the notation that \$12.5 million of the additional money provided in the Senate bill was intended to match the \$12.5 million raised so far by Armand Hammer's STOP Cancer Foundation.

Floor discussion on the bill made it clear that the \$900,000 for information dissemination was intended for the Cancer Information Service. Contracts for CIS were recomputed this year, and without the additional money, NCI will not be able to maintain the same number of CIS offices that it has been supporting.

Hammer had worked out an informal agreement with members of Congress to the effect that the government would match any

---

### THE CANCER LETTER

Editor: Jerry D. Boyd

Associate Editors:

Patricia Williams, Kirsten Boyd Goldberg

P.O. Box 15189, Washington DC 20003

Telephone (202) 543-7665

FAX No. (202) 543-6879

Published 48 times a year by The Cancer Letter Inc., also publisher of The Clinical Cancer Letter and AIDS update. All rights reserved. None of the content of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, facsimile, recording or otherwise) without the prior written permission of the publisher. Violators risk criminal penalties and \$50,000 damages. (ISSN 096-3917)

funds Hammer raises, up to \$500 million. Hammer's effort is intended to continue at least through 1992.

The House report directed NCI to spend \$1.5 million to fund "a limited number" of proton beam referral centers (see below).

The Senate did not specify how much money should be added to the cancer centers budget, and it is not yet clear how much will be required to maintain the same number of center core grants.

In the past, NCI has not always complied with committee report directives from one body or the other, considering them mandatory only when they come from both. The institute usually makes an effort to comply with directives from either the House or Senate, but not when it may be considered contrary to NIH or HHS policy, or if sufficient funds are not available.

Once NCI source said this week that the bill "didn't give us enough money to do all the earmarking the Senate wanted."

The attempt to earmark money for proton therapy research and development was the reaction by Massachusetts members of the House Appropriations Committee to the rejection by NCI advisors to a request from Harvard to reopen funding in that area.

The Board of Scientific Counselors of NCI's Div. of Cancer Treatment voted against accepting an application from Harvard for funds to replace its cyclotron (The Cancer Letter, Feb. 24). Harvard representatives indicated then that they might seek legislative action to overturn that decision.

The committee report did not specify that the proton development money should go to Harvard. When that language showed up in the committee report, DCT's Radiation Research Program assumed that it would be expended through competitive peer review if it did become available, and developed a concept proposal for an RFA which was submitted to the Board of Scientific Counselors at its meeting earlier this month.

The concept proposal allocated only the \$1.5 million in the committee report, and stated that it would be for only one year. However, Harvard had estimated that the total cost for a new heavy particle accelerator would be \$21 million and that operation of the facility would be about \$5 million a year. Clearly, the congressional earmark would be only a modest down payment on the entire project.

"This is an end run to Congress, as we predicted would happen," Board Chairman John Niederhuber said.

"I suggest that we not vote on this to express our opposition to end runs," Board member John Mendelsohn said.

"If the money becomes available, we will need this RFA," DCT Director Bruce Chabner said. "I don't know how we would spend it without this. We can make it broad enough so that anyone can apply."

Board member James Cox, responding to the question whether the money might go directly to Harvard if a competitive process is not established, said "there may be some risk of that if we don't approve it."

The concept was approved, with Mendelsohn and board member Yung-Chi Cheng voting against it "on principle."

The concept description states that the project is designed to support one or two exploratory/developmental grants to conduct planning and development of a limited number of proton beam therapy research and treatment centers for inoperable and inaccessible brain tumors and other appropriate malignancies. In the course of these planning grants, it is anticipated that the grantees would evaluate the existing proton therapy experience and its implications for future facilities; analyze the technologies of existing proton medical facilities for possible improvements and explore alternative new technologies for possible cost savings and technical advantages; and determine specific facility requirements and other parameters.

Whether an RFA will be issued will be determined by NCI Director Samuel Broder and his Executive Committee.

## **RO1 Grants Pool, New Investigators Hit By Increasing NCI Budget Strains**

Strains being imposed by the growing pressures on NCI's budget were reflected in concerns expressed by members of the Board of Scientific Counselors of NCI's Div. of Cancer Treatment.

NCI Deputy Directory Maryann Roper first described the budget situation, in which only 20 percent of approved competing grants will be funded, and that only an estimated 12 percent of approved grant applications submitted by new investigators will be funded.

Roper and DCT Director Bruce Chabner also discussed the new criteria which will be used to determine if a cancer center can be

officially designated as "comprehensive." Roper pointed out that one requirement will require comprehensive centers to assume leadership in community outreach activities, and Chabner emphasized the requirement for participation in high priority clinical trials.

Cuts in numbers of RO1 grants, especially in those going to new investigators, at a time when NCI is stepping up pressures on cancer centers to increase activities which inevitably add to their costs, seemed incongruous to some board members.

"Funding only 12 percent of new investigator grants has the makings of a catastrophe," Ralph Weichselbaum said. "Funding only 17 percent of established investigators will surely unestablish some of them. That is not a sensible instrument of national policy."

Emil Frei added that if the 12 percent for new investigators continues for four or five years, "new talent is not likely to come into biomedical research."

"How can you expect graduate students or post docs to think about going into science?" Susan Horwitz asked.

Chabner pointed out that the amount of money in the RO1 grant pool has been impacted to some extent by NCI's Outstanding Investigator Grants and NIH's MERIT grants, "which extends the time of grants of established investigators at the expense of the regular RO1 pool."

Chabner suggested that "the essential problem is the total amount of money available. . . The most straightforward way to deal with the problem is to get more money, or to hold down the cost of grants."

Chabner said that DCT has been promoting three goals in NCI cancer center planning discussions: active participation of all clinical and comprehensive centers in high priority national trials unless the centers have an ongoing study of their own in the disease in question; dissemination of clinical trials results and new technologies in treatment by centers within their communities; and pursuit of treatment research in diseases of unusual incidence or significance in communities served by centers.

He cited one high priority trial in which accrual is lacking, neoadjuvant therapy of bladder cancer. This trial, testing the MVAC regimen developed at Memorial Sloan-Kettering, has accrued only 59 of the 300 patients required after two years. "There has been little if any contribution of the major cancer centers, included the center that

invented the regimen, the center of the principal investigator, and other leading institutions. This is not acceptable."

Weichselbaum suggested that one reason for slow accrual in the bladder cancer trial is that some other regimens offer organ preservation. "People will give up a lot for quality of life."

"The case for organ salvage has yet to be proven," Chabner said.

"Is DCT putting its best foot forward in emphasizing participation in high priority trials by centers?" board Chairman John Niederhuber asked. The strong point of centers is bench to bedside, creative research, he said. "Large phase 3 trials need to be marketed outside of centers."

"I'm concerned about the stress on outreach," John Mendelsohn said. "Outreach is very expensive, and not always possible on limited funds."

"That may not be your priority, but the National Cancer Advisory Board says it is if you want to be a comprehensive center," Chabner said.

Horwitz said she was concerned about "the amount of paper it will take to review centers both for comprehensiveness and for their core grants. It's getting out of hand."

"At the risk of being shot by my colleagues," James Cox said, "the National Cancer Act is coming up on 20 years. People ask, 'What have you done?', not 'What are you doing in molecular biology that will have an impact in the year 2050?' They want to know what you have done that will have an impact now."

## **Harold Amos, Former NCAB, Panel Member, Receives Drew Medical Prize**

Harold Amos, who spent his entire career in basic research but became a champion of the National Cancer Act and the special programs it spawned, has been awarded the Charles R. Drew Medical Prize for outstanding contributions to medicine by a minority scientist.

Amos was appointed to the National Cancer Advisory Board in 1972, shortly after the board was reconstituted out of the National Cancer Advisory Council under terms of the National Cancer Act of 1971. He was reappointed to a second term, and when that expired, President Carter appointed him to the President's Cancer Panel.

Although he brought the point of view of a highly respected laboratory scientist to the NCAB and the Panel, Amos strongly supported

the Organ Site Program, clinical trials, cancer centers, and education programs. He chaired an NCAB committee which reviewed the Frederick Cancer Research Center, at a time when many of his colleagues were highly critical of NCI's operations there. The committee's recommendations were credited with significant improvements there.

Amos and fellow Panel member Bernard Fisher, who are the only two persons to serve on both the Panel and NCAB, determined that the NCI and NIH grants award processes could be improved. Their work led to establishing NCI's Outstanding Investigator Awards, the NIH MERIT awards, and to longer award periods.

The Drew Prize included a cash award of \$50,000, which Amos donated to a minority scholarship fund he established at Harvard.

Amos, who is 70, has retired as professor of bacteriology and immunology at Harvard.

## DCT Board OKs New Imaging Study In Split Vote, Small Grant Program

A new program of small grant awards to stimulate correlative laboratory studies and innovative clinical trials received concept approval from the Div. of Cancer Treatment Board of Scientific Counselors at the board's meeting this month.

The grants will be limited to \$50,000 each, with an estimated 10 to 12 to be supported out of the \$750,000 set aside for the program.

The board was sharply divided over another proposed RFA, finally giving concept approval on a 9-4 vote for grants to study new methods of imaging bone marrow tumors. One of the issues involved was whether NCI should continue to issue RFAs at a time when severe budget restrictions may permit funding of less than 20 percent of approved new and competing ROI grants.

The board also approved concepts for new RFAs for digitization of chest radiography for lung cancer, and for diagnostic imaging studies of tumor perfusion.

Also receiving concept approval was the recompetition of contracts by the Developmental Therapeutics Program for maintenance of a rodent production center and for operation of an animal diagnostic laboratory.

Concept statements and board discussion follow:

**Small grants to stimulate correlative laboratory studies and innovative clinical trials.** Proposed first year awards to total \$750,000 for approximately 10-12 awards for one to two years.

NCI supports an extensive network of clinical and laboratory

research studies related to cancer therapy through contracts, grants, and cooperative agreements. At present, there is no mechanism targeted to stimulate the communication of promising and potentially relevant innovative developments between the laboratory and the clinical setting. It has been difficult and time consuming for investigators who propose correlative laboratory studies to clinical trials to obtain complementary funding through either the traditional basic research grant mechanism or through the cooperative agreement mechanism.

The purpose of this RFA is to provide a mechanism for NCI to foster collaborative interactions between laboratory scientists and clinicians to support innovative laboratory studies that are related to clinical trials and innovative clinical trials that may require laboratory support. The small grants mechanism (RO3) was selected because of the rapid review and funding that is possible, the relatively modest incremental cost to obtain laboratory studies on patients being treated on clinical trials and to correlate the laboratory results with clinical outcome, and the narrow focus of the specific aims in these studies.

This project will fund single or multiple institutions (individual institutions, consortia, cancer centers, cooperative groups, etc.) to perform innovative correlative studies of relevance to clinical trials. Support will be limited to institutions with established clinical, laboratory, and statistical resources that are funded primarily through other sources. These pre-existing resources need not be at a single institution, but may exist within a consortium. The proposed laboratory studies must have been piloted, preferably extensively, in the proposing laboratory and have been demonstrated to be applicable to samples of tissue or body fluids, etc., from patients entered onto clinical trials. Statistical support should be included to ensure proper correlation of assay parameters with clinical outcome. Some examples of support that would qualify under this RFA would be salary for an additional technician, money for additional supplies for the assays, and salary support for data management, data entry, and coordination of sample procurement.

**Michael Friedman**, director of the Cancer Therapy Evaluation Program which will administer the grants, said that the time to award after submission of application is expected to be six months. Approval by the National Cancer Advisory Board will not be required since they will not exceed \$50,000. "I would really like to try this," Friedman said. "We've heard so much about the need for a little bit of money to do this or that." He noted that board member Charles Balch, who could not attend this meeting, had suggested the program.

Lab/clinic correlative studies "is an area in which NIH has had the leadership," board member John Mendelsohn said. "This will allow the extramural community to do the same."

The grants will be reviewed by the Cancer Clinical Investigation Review Committee, which reviews cooperative group grants, "subject to Mrs. (Barbara) Bynum's decision," DCT Director Bruce Chabner said. Bynum is director of the Div. of Extramural Activities.

**Imaging of bone marrow tumors.** Proposed first year award totaling \$500,000 will support two or three grants, each for three years.

Radionuclide bone scanning is the standard method for screening the skeleton for metastatic tumors. This method, however, suffers from its relative insensitivity to some marrow neoplasms, such as leukemia, lymphoma, and myeloma. Marrow studies with radiolabeled colloids have not been routine, and conventional radiographs are insensitive to many marrow tumors. Unlike other imaging methods, magnetic resonance imaging has the major benefit of imaging bone marrow directly. Neoplasms (leukemia, lymphoma, and metastatic tumors) alter the marrow cellularity and are usually best seen on T<sub>1</sub> weighted MRI images. Yet these studies are relatively nonspecific and can be confused with non-neoplastic processes such as severe anemia, normal variations in distribution of red marrow, and osteomyelitis.

The objective of this RFA is to support meritorious research for a study of anatomy and physiology of normal and diseased bone marrow using the most advanced imaging technology, such

as MRI and radionuclide bone scan.

**Opposition** was based on two factors: Removing \$500,000 a year from the RO1 pool in a tight budget year, and lack of mention in the concept statement of the roles of magnetic resonance spectrometry and tumor biology. Radiation Research Program Director John Antoine pointed out that the complete RFA could include those items. "The scientific question here is, can we use better technology to better stage and follow these tumors than with conventional x-ray and radionuclide bone scans?"

"The assumption that you need to image to adequately treat needs to be challenged," board member William Hryniuk said.

Board member Emil Frei said that industry and health insurers could benefit from the research and should be willing to put some money into it. Board member William Hendee said that industry already is putting money into this type of research and could be asked for more.

Board member Susan Horwitz said, "This whole thing needs to be rewritten" to include MRS research along with studies of tumor biology and response to therapy. DCT Director Bruce Chabner agreed to incorporate those in the RFA.

Mendelsohn objected to giving this research "preferential treatment" through the RFA process, in which the money set aside could be awarded entirely to respondents if their grants receive reasonably good priority scores. "I'm worried about young investigators, considering the budget," Mendelsohn said.

Mendelsohn, Frei, Horwitz, and Hryniuk voted against the concept in the 9-4 vote for approval.

**Digitization of chest radiography for lung cancer.** Estimated first year cost is \$600,000, to fund three to five grants, each for three years.

Since its inception, the discipline of radiology has depended on photographic film as the primary vehicle for recording, interpreting, transmitting, and storage of the radiologic image. A change in this traditional approach to image recording is occurring as digital techniques become established in departments of radiology across the country. These techniques are, in fact, an integral part of the imaging process in diagnostic ultrasound, nuclear medicine, computed tomography, magnetic resonance imaging, and angiography. Only the principal discipline of roentgenology remains relatively unaffected by digitization, but this appears to be changing rapidly. Before these developments can be implemented in the clinical environment, however, certain problems associated with the digitization, transmission, storage, and retrieval of radiologic data must be resolved.

Radiographic examination of the chest is the most commonly performed study in diagnostic radiology. Digitization of the chest radiograph is technically difficult. It requires high spatial resolution to capture the fine details of the vessels and bronchi and to detect small lesions. No universally acceptable digital chest system has been developed, but as systems improve, more sophisticated processing options will arise. The simplest processing technique permitting interactive choice of mean and window are useful, but more advanced algorithms will open digital chest radiography to quantitative analysis, particularly concerning application of dual energy techniques.

The objective of this RFA is to support research in the application of digital chest radiography in the detection and characterization of the lesions seen in lung cancer.

**Board member Yung-Chi Cheng** asked why industry would not sponsor this research, "since they would benefit." Antoine said that there was no broad industry interest, "no big profit motive."

The concept was approved unanimously.

**Diagnostic imaging studies of tumor perfusion.** Estimated first year cost totaling \$600,000 would support four to six grants, each for three years.

The accurate assessment of blood flow is of considerable interest for medical diagnosis. Angiography, digital subtraction angiography, radionuclide studies, and MRI have been used to also determine regional flow. Numerous types of contrast media have been developed during the past decade to facilitate these

studies. Techniques that allow quantitation of blood flow and perfusion may provide important information on disease processes. In particular, there is great interest in increasing the specificity of procedures used to detect neoplasms. Recent MRI techniques have described procedures that may provide a measure of tissue perfusion and diffusion. Because perfusion and diffusion change with disease, techniques that measure these parameters are vitally important measures of disease and the response to therapy.

The objective of this RFA is to apply the newest imaging technologies, i.e., MRI, PET, SPECT, to the measurement of perfusion and diffusion of neoplasms to increase the specificity of these techniques.

"It strikes me that this is another area where we need more biology," Board member John Niederhuber said. Antoine agreed: "The imaging community needs to work more closely with the biology community in developing these proposals," he said.

Hryniuk pointed out that "adriamycin and methotrexate perfuse quite differently," adding another dimension to the problem.

The concept was approved, with Cheng and Frei abstaining.

**Maintenance of a rodent production center.** Recompetition of a contract currently held by Taconic Farms. Estimated annual cost for the first year of a three year contract is \$246,000.

Rodent production centers have served as a useful function in the past for producing large numbers of inbred strains and first generation hybrids for the in vivo drug screening program and other NCI supported research activities. This approach to screening has been replaced by an in vitro program that, for related in vivo studies, utilizes human tumors that grow exclusively in athymic nude mice. To meet the need for these athymic nude mice, the Biological Testing Branch of the Developmental Therapeutics Program has utilized a rodent production center contract at a level of 2,000 cages maintained under maximum barrier conditions capable of producing such mice free of pathologic contamination.

One rodent production center contract has been utilized during the past three years for the exclusive production of athymic nude mice. Approximately 1,200 nude mice are shipped weekly from this 2,000 cage contract.

It is DCT's intent to re compete this effort at the same level (2,000 cages) effective Nov. 1, 1990, for a three year period. This contract is necessary to meet the continual needs for athymic nude mice, possibly including further assistance to the scientific community in response to the losses resulting from the fire at Jackson Laboratories.

The concept was approved without dissent.

**Operation of an animal diagnostic laboratory.** Recompetition of contracts held by the Univ. of Miami and the Univ. of Missouri. Estimated total first year costs for both contracts in the recompetition is \$250,000. The new awards will be for five years.

Animal disease diagnostic laboratories that specialize in rodent diseases have provided an important approach to quality control monitoring for laboratory animal production and usage capabilities during continuing efforts to upgrade all aspects of this area. With the program direction towards usage of human tumor cell lines involving athymic nude mice, excellent diagnostic support, encompassing all rodent pathogen possibilities, including viral, bacterial, and parasite species, is essential. Because of the impaired immune system in athymic mice, more emphasis has been placed on pathology support. However, viral serology will be utilized (sentinel animals), and microbial cultures will be necessary.

These two contracts received laboratory animals weekly, as scheduled by the project officer, from the DTP animal production contractors and those contractors performing in vivo research activities. This testing confirmed the health status of the production colonies as well as the research colonies that were monitored.

The contract was approved unanimously.

## NCI Advisory Group, Other Cancer Meetings For Nov., Dec., Future

**Recent Advances in the Biology & Treatment of Cancer**--Nov. 1-2, Dallas, TX. Univ. of Texas--Southwestern Medical Center. Contact Dr. Robert Hadsell, Director, 5323 Harry Hines Blvd, Dallas, TX 75235-9069, phone 214/688-3404.

**How Much Cancer Can Be Prevented by Dietary Change?**--Nov. 1-3, Nagoya, Japan. UICC Nutrition and Cancer Program Workshop. Contact Dr. Curtis Mettlin, Roswell Park Memorial Institute, Buffalo, NY 14263, phone 716/845-4406.

**Oncogenes & Mitogens Symposium**--Nov. 2-3, Charlottesville, VA. Contact Univ. of Virginia Health Science Center, Charlottesville, VA 22908.

**Meeting Patient and Family Support & Referral Needs**--Nov. 3, 10 and 17, Univ. of Pittsburgh School of Nursing. Contact Denise Brooks, 412/624-7899.

**First International Symposium on Immunobiology of Renal Cell Carcinoma**--Nov. 6-7, Cleveland, OH. Contact Dr. Ronald Bukowski, Cleveland Clinic Cancer Center, 9500 Euclid Ave., Cleveland, OH 44195-5236, phone 216/444-6825.

**Epidemiology in Action**--Nov. 6-17, Atlanta, Ga. Contact Emory Univ. Div. of Public Health, 1599 Clifton Rd NE, Atlanta, GA 30329.

**Hospice Care Course for Nurses**--Nov. 7-9, Philadelphia, PA. Contact Julia Goplerud, Fox Chase Cancer Center, 7701 Burholme Ave., Philadelphia, PA 19111, phone 215/728-2700.

**Melanoma: State of the Art Research**--Nov. 8, Chicago. Illinois Cancer Council conference. Contact Patti Jelen, Coordinator, ICC, 36 S. Wabash Ave. Suite 700, Chicago 60603, phone 312/346-9813.

**33rd Annual Clinical Conference: Endocrine and Nonendocrine Hormone Producing Tumors**--Nov. 8-11, Univ. of Texas M.D. Anderson Cancer Center. Call 713/792-3030.

**National Committee to Review Current Procedures for the Approval of New Drugs for Cancer and AIDS (Lasagna Committee)**--Nov. 9, NIH Bldg 31 Rm 10, 9 a.m.

**Practical Advances in Biodiagnosis and Biomodulation for the Medical Oncologist**--Nov. 9-10, New York City. Contact Jaclyn Silverman, Div. of Medical Oncology, Box 1178, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029, phone 212/241-6772.

**GI Cancer**--Nov. 10-11, Century Plaza Hotel, Los Angeles. Sponsored by Saint Joseph Medical Center. Contact Nomi Feldman, 3770 Tansy, San Diego, CA 92121, phone 619/453-6222.

**Multidisciplinary Management of Bronchogenic Carcinoma: Advances and Controversies**--Nov. 11, Cleveland. Contact Betty Olson, Education Coordinator, Ireland Cancer Center, Univ. Hospitals of Cleveland/Case Western Reserve Univ., 2074 Abington Rd., Cleveland, OH 44106, phone 216/844-7858.

**New Approaches to Problems in Radiation Oncology: Applications of Molecular Biology**--Nov. 12-15, Univ. of Arizona Health Sciences Center, Tucson, AZ. Contact Mary Humphrey, Arizona Cancer Center, phone 602/626-2276, fax 602/626-2284.

**Prospects of Oncological Clinical Research**--Nov. 13-14, Hotel Intercontinental, Paris. Contact Pr S. Khoury, Hopital de la Pitie, Urology Service, 83 Bd de l'Hopital, 75013, Paris, France, phone (1)45703862, fax (1)45703078.

**EORTC Symposium on Advances in Gastrointestinal Cancer**--Nov. 15-17, Strasbourg, France. Contact Dr. M. Adloff, Centre Medico-Chirurgical et Obstetrical de las Securite Sociale, 19 rue Louis Pasteur, Schiltigheim B.P. 120, 67042 Strasbourg Cedex, France, phone (88)628300.

**International Congress on Oral Cancer**--Nov. 15-19, New Delhi, India. Contact Ajeet Gopal and Associates, 9-237, Greater kailash-II, New Delhi 110048, India.

**Comprehensive Care in Pediatric Hematology/Oncology**--Nov. 16-18, Orlando. Contact Cindi Butson, Florida Assn. of Pediatric Tumor Programs Seminar, PO Box 13372, Gainesville, FL 32604, phone 904/375-6848.

**Fourth Annual National Coalition for Cancer Survivorship Assembly**--Nov. 17-19, Los Angeles, CA. Contact Catherine Logan, NCCS, 323 Eighth St. SW, Albuquerque, NM 87102, phone 505/764-9956.

**Advances in Cancer Management for the Surgeon**--Nov. 20-

22, Boston, MA. Sponsored by Massachusetts General Hospital Cancer Center. Contact Harvard Medical School, Harvard MED-CME, P.O. Box 825, Boston, MA 02117, phone 617/732-1525.

**Ninth Asia Pacific Cancer Conference**--Nov. 22-26, Lahore, Pakistan. Contact Dr. S.A. Askari, PO Box 6042, Lahore, Pakistan.

**Current Aspects of Treatment of Soft Tissue Sarcoma**--Dec. 1, Buffalo, NY. Contact Gayle Bersani, Roswell Park Memorial Institute, Carlton & Elm Sts., Buffalo, NY 14263, phone 716/845-2339.

**BASO Winter Meeting**--Dec. 1-2, London, UK. General oncological subjects. Contact British Assn. of Surgical Oncology, Lincoln's Inn Fields, London WC2A 3PN, UK.

**Breast Cancer: New Developments in Biology, Diagnosis & Treatment**--Dec. 3-9, London, UK. Contact The British Council, 65 Davis St., London W1Y 2AA, UK.

**National Cancer Advisory Board**--Dec. 4-5, NIH Bldg 31, Rm 6. Contact Winifred Lumsden, 301/496-5708.

**Hamburg Symposium uber Tumormarker: Recent Results in Tumor Diagnosis & Therapy**--Dec. 4-6, Hamburg, W. Germany. Contact Dr. R. Klapdor, I. Dept. of Medicine, Univ. Hospital, Martinstrasse 52,2, Hamburg 20, FRG.

**Foundation Course in Care of the Patient With Advanced Cancer**--Dec. 4-8, Oxford, UK. Contact Study Centre Coordinator, Sir Michael Sobell House, The Churchill Hospital, Oxford, OX37LJ, UK.

**National Committee to Review Current Procedures for Approval of New Drugs for Cancer & AIDS (Lasagna Committee)**--Dec. 7, NIH Bldg 31, Rm 10. Meeting is closed. Contact Dr. Elliott Stonehill, 301/496-1148.

**12th Annual San Antonio Breast Cancer Symposium**--Dec. 8-9, San Antonio, TX. Sponsored by Cancer Therapy & Research Foundation of South Texas and the American Cancer Society. Contact Lois Dunnington, 512/567-4745.

**Leukemia & Lymphomas**--Dec. 11-12, London, UK. Contact B. Cavilla, Institute of Biology, 20 Queensberry Place, London, SW7 2DZ, UK.

**Current Therapies in Veterinary Oncology**--Dec. 16, Portofino, Italy. Contact Servizio Attivita Culturali, Istituto Nazionale per la Ricerca sul Cancro, V. le Benedetto XV, 10, 16132 Genova, Italy.

### FUTURE MEETINGS

**American Cancer Society National Conference on Advances in Cancer Imaging**--Jan. 24-26, New York. Contact ACS, 1599 Clifton Rd NE, Atlanta, GA 30329, phone 404/329-7604.

**Steroid Receptors, Transcription Factors and Gene Expression**--Feb. 10-13, San Diego, CA. Sponsored by American Assn. for Cancer Research. Application deadline Dec. 11, 1989. Contact Adam Blistein or Jeff Ruben, AACR, 330 Market St., 2nd Floor, Philadelphia, PA 19106, phone 215/440-9300, fax 215/440-9313.

**Monoclonal Antibody Immunoconjugates for Cancer**--March 15-17, San Diego, CA. Contact Cass Jones, Professional Conference Management Inc., 7916 Convo Court, San Diego, CA 92111, phone 619/565-9921.

**The Molecular Basis of Human Cancer**--March 29-30, Chapel Hill, NC. Contact Lineberger Cancer Research Center School of Medicine, Campus Box #7295, Univ. of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7295, phone 919/966-3036.

**Drug Resistance as a Biochemical Target in Cancer Chemotherapy**--May 10-11, Tokyo, Japan. Thirteenth annual Bristol-Myers Symposium on Cancer Research.

**81st Annual Meeting American Assn. for Cancer Research**--May 23-26, Washington, D.C. Contact AACR, 330 Market St., 2nd Floor, Philadelphia, PA 19106.

**Fourth International Symposium on Epstein-Barr Virus and Associated Malignant Diseases**--Sept. 23-28, 1990, Hualien, Taiwan. Contact Prof. Czau-Siung, Yang National Taiwan Univ. College of Medicine, No. 1 Jen Ai Rd, 1st Section, Taipei, Taiwan, ROC, phone 3911301 ext. 243 or 276.

## RFPs Available

Requests for proposals 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 Executive Plaza South room number shown, National Cancer Institute, Bethesda MD 20892. Proposals may be hand delivered to the Executive Plaza South Building, 6130 Executive Blvd., Rockville MD. RFP announcements from other agencies will include the complete mailing address at the end of each.

#### RFP NCI-CP-05620-56

Title: In vitro evaluation of chemical candidates for in vivo testing

Deadline: Dec. 6

NCI's Div. of Cancer Etiology is a major source of chemical candidates for testing by the National Toxicology Program. In many cases in reviewing certain compounds or classes of compounds, in vitro data could facilitate the process of chemical selection. In addition, investigators of DCE require the support of mutagenicity assays on an infrequent basis.

In Task I, Salmonella Typhimurium Assay, the offerors will be required to test up to 20 to 30 coded samples per year for four years for their ability to induce mutations in salmonella typhimurium. Up to five samples per year will not be coded samples of chemical compounds but will be human urine specimens (single or pooled specimens). A preliminary toxicity experiment will be run on all chemicals, prior to mutagenicity testing. Only the TA100 strain will be used, one or two plates per dose, without metabolic activation and with rat and/or hamster S-9. All chemicals will be tested initially in salmonella strains TA98 and TA100 with and without metabolic activation (10 percent S-9 derived from the livers of Aroclor 1254 induced male Sprague-Dawley rats and Syrian hamsters). Positives will be repeated under the conditions giving the positive response. If negative, the chemicals will be tested in TA1535, TA1537 and TA1538 (with and without activation). It must be anticipated that approximately one third of the above chemicals will have to be retested. This will depend on the assay results and will be determined by the project officers. In the data submitted for all tests, there must be: 1) satisfactory checks on bacterial strains; 2) acceptable solvent control; 3) acceptable positive controls; and 4) four acceptable dose levels.

In Task II, Mouse Lymphoma Assay, the offerors shall test approximately 20 to 30 coded samples per year for four years for their ability to induce mutations in the mouse lymphoma assay (L5178Y TK+/-). Up to five samples per year will not be coded samples of chemical compounds but will be human urine specimens (single or pooled). Each compound shall be tested with and without liver enzyme S-9 preparations. The S-9 fraction will be from Aroclor 1154 induced male Fischer 344 rats. Currently run positive controls shall be a promutagen such as 3 methylcholanthrene for the activation component and a direct acting mutagen such as hycanthon sulfate for the nonactivated. Initial range finding experiments will be conducted and dose levels of the mutagenicity assay will be selected. Duplicate cultures will be performed for each dose level in the mutagenicity assay. Five test article treated doses will be cloned for mutant selection. Quadruple solvent controls will be initiated. Background spontaneous mutation level of solvent control shall not exceed 100 mutants per 10<sup>6</sup> clonable cells. Each study submitted must have acceptable results for four dose levels. Mutant colony size distribution on the mutant selection cultures will be determined.

Awards will be made for either or both tasks to one offeror; multiple awards may be made on this basis. This is a recompetition of a contract held by Microbiological Associates Inc., Rockville, MD. It is anticipated that cost reimbursement type contract and/or contracts will be awarded for four years. This is a 100 percent small business set aside.

Contracting Officer: Donna Winters

RCB Executive Plaza South Rm 620  
301/496-8611

#### RFP NCI-CO-94380-34

Title: Technical support service for the Div. of Extramural Activities and the Grants Administrative Branch of NCI

Deadline: Dec. 18

This is a correction of an RFP originally publicized in Commerce Business Daily, Sept. 12, page 3. NCI's Div. of Extramural Activities and the Grants Administrative Branch are interested in soliciting proposals from organizations for a contract period of five years for services which will be defined by task orders issued during the period of performance. The task orders will be issued under the following five areas:

1) Technical support for review of grant applications; 2) quick turnaround assistance; 3) National Cancer Advisory Board and President's Cancer Panel support; 4) ad hoc technical assistance; and 5) task order development and administration. These services will be provided under a level of effort, cost plus fixed fee contract for 80,400 labor hours. Offerors will not be considered eligible for award unless they can demonstrate their ability to meet with the project officer in Bethesda, MD, within 24 hours. SIC code for this project is 8732 and the size standard is average annual revenue for the preceding three years not in excess of \$3.5 million. This contract is a 100 percent small business set aside. All those eligible who applied under the initial synopsis are being retained on the source list and need not reapply.

Contract Specialist: Elizabeth Abbott

RCB Executive Plaza South Rm 635  
301/496-8603

## NCI Contract Awards

Title: Epidemiology of human T-cell leukemia/lymphoma virus.

Contractor: Caribbean Epidemiology Centre, Trinidad, \$1,896,459.

Title: Evaluation of chemopreventive agents by in vivo screening assays (master agreement).

Contractors: Univ. of Nebraska, \$336,887; IIT Research Institute, \$264,539; IIT Research Institute, \$410,408; Univ. of Alabama, \$141,509.

Title: Multidisciplinary technical resources and support for chemoprevention research--Part A and B (master agreement).

Contractors: CCS Associates, \$170,615; CCS Associates, \$161,114; CCS Associates, \$90,299; CCS Associates, \$59,040; ERC Bioservices, \$124,197; Information Ventures, \$142,566; Prospect Associates, \$139,146.

Title: Breeding and production of 129/J and NFR mice and specified research activities.

Contractor: State of California Dept. of Health Services, \$651,208.

Title: Support services for childhood leukemia and residential and electromagnetic fields.

Contractor: Westat Inc., \$3,398,079.

Title: Worksite, school-worksite and religious organizations survey for community intervention trial for smoking cessation.

Contractor: Schulman, Ronca and Bucuvalas Inc., \$102,890.

Title: Cohort tracking survey for community intervention trial for smoking cessation.

Contractor: Westat Inc., \$299,922.

Title: Isolation and purification of taxol from the primary methanol extract of *Taxus brevifolia*.

Contractor: Polysciences Inc., \$185,668.

Title: Record linkage study of patients receiving gynecologic operations.

Contractors: Swedish Cancer Registry, \$118,206; Danish Cancer Registry, \$156,132.

Title: Isolation and purification of taxol from the primary methanol extract of *taxus brevifolia*

Contractor: Hauser Chemical Research Inc., \$117,167

Title: Preclinical toxicology of chemopreventive agents

Contractor: International Research & Development Corp., \$1,364,521 (four master agreement orders)