4/15/83 DRS

THE CANCER LETTER

Vol. 9 No. 15
April 15, 1983


Subscription $125 year North America
$150 year elsewhere

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## OMB REVISIONS WOULD KILL 16 CENTER CORE GRANTS, BAN NEW ONES, SLASH NONCOMPETING FUNDS 10 PERCENT

Sixteen of the 20 cancer center core grants which will be up for renewal in the 1984 fiscal year will not be funded if a policy promulgated by the Office of Management & Budget last week is permitted to stand. Also, no new core grants would be funded.

OMB revised the Administration's 1984 budget request for NIH, sending the revision to Congress April 8. The revision was made to make more money available for R01 and P01 grants, enough to increase the number of new and competing grants from about 3,700 to nearly 5,000.

*(Continued to page 2)*

*In Brief*

### CHARLES SMART TO GIVE UP COMMISSION ON CANCER POST, KANSAS SURGEON TO BECOME FULLTIME DIRECTOR

**CHARLES SMART**, who has headed the American College of Surgeons Commission on Cancer for the past five years, will give up that position next July. Smart is chief of surgery at LDS Hospital in Salt Lake City, and the demands of the Commission job have grown substantially, Smart said. In fact, his replacement, John Snyder of Winfield, Kan., will become the Commission's first fulltime executive director. Snyder is a general surgeon. The Commission operates the ACOS cancer hospital approvals program, sponsors professional education programs, conducts surveys on trends in cancer treatment, and is developing microcomputer software for networking hospital cancer programs. . . . **BERNARD FISHER** and **JEFFREY SCHLOM** were honored at the biennial conference last month in Denver of the International Assn. for Breast Cancer Research. Fisher, chairman of the National Surgical Adjuvant Breast & Bowel Project, received the Joseph H. Morton Award from the AMC Cancer Research Center for his contributions to "more rational and effective treatments" of breast cancer. Schlom, chief of the Laboratory of Tumor Immunology & Biology at NCI, received the Leona Kopman Award from AMC for his "innovative and distinguished research that has consistently placed him at the forefront of his field." Schlom is a pioneer in the development and use of monoclonal antibodies. . . . **BRISTOL-MYERS** has added two more cancer centers to the 11 receiving unrestricted research grants from the company—Massachusetts Institute of Technology Cancer Research Center and the Ontario Cancer Institute/Princess Margaret Hospital. The two new grants total $1 million. Salvador Luria at MIT and Raymond Bush at Ontario will adminster them. . . . **MORE THAN** one million Americans are currently under treatment for cancer, the American Cancer Society says in its 1982 annual report. Nearly half of them received some form of help from ACS. Contributions to the Society hit a new high, of $183 million.

## OMB BUDGET REVISIONS WOULD DEVASTATE CENTERS PROGRAM; OTHER CUTS MADE

*(Continued from page 1)*

Instead of adding $184 million to the NIH budget which would be required to fund the additional grants, OMB told NIH to take the money from that allocated for centers, research support grants, and certain areas of applied research. New and competing R01s and P01s would not be funded at recommended levels, and additional money would be squeezed from noncompeting R01s and P01s.

OMB's action is the result of a final budgetarv maneuver by former HHS Secretary Richard Schweiker just before he left office. Schweiker's feuds with OMB during his time in office were major confrontations which he usually won. He did not wangle as much for NIH as he thought necessary for the 1984 budget, however. Schweiker directed NIH to prepare a budget showing only 3,700 new and competing renewal research grants, 1,300 less than the target number established several years ago by Congress and agreed to by the Carter and Reagan administrations. He then reopened negotiations with OMB, hoping to pry loose the additional $184 million.

In some quarters, that maneuver was regarded as the old "Washington Monument ploy" (Congress fails to give the Dept. of Interior all the money the department says it needs, so Interior announces it will have to close the Washington Monument, thus bringing to bear irresistible pressures on Congress, and the additional money is appropriated). If so, it was unrealistic to expect the ploy to work as a lever applied by an agency of the Executive Branch against the White House.

The 20 centers whose grants will expire in the 1984 fiscal year are Bowman Gray, Univ. of Southern California, Salk Institute, Howard Univ., UCLA, Roswell Park Memorial Institute, Univ. of North Carolina, New York Univ. Medical Center, Yale Univ., M.D. Anderson Hospital, Dartmouth, La Jolla Cancer Research Foundation, Northwestern Univ., Univ. of Texas Medical Branch (Glaveston), Univ. of Vermont, Detroit Comprehensive Cancer Center, Univ. of Arizona, Purdue Univ., Univ. of Iowa, and St. Jude Children's Research Hospital.

Eliminating funding for 16 of those would wipe out about one fourth of the cancer center core grants and probably would mean an end to the Cancer Centers Program; it certainly would, if carried out for two or three more years.

It does not seem likely that Congress will allow the Administration to implement such a devastating decision.

Sen. Lowell Weicker (R.-Conn.), chairman of the Labor-HHS Appropriations Subcommittee, said at the hearing on the NIH budget Tuesday, "I have some grave reservations about this." Weicker told NIH Director James Wyngaarden, "You may not be asking for more funds, but you may be getting more. I'm not going to attempt to balance the budget at the terrible expense of mortgaging the future of medical research. . . . Politicians can screw around all they want in getting votes, but we're talking here about death and suffering."

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### REVISIONS IN NCI, NIH 1984 BUDGETS BY OFFICE OF MANAGEMENT & BUDGET

**1. Only four of the 20 cancer center core grants which will be up for renewal would be funded, based on priority scores.**
**2. No new cancer center core grants would be funded.**
**3. Noncompeting cancer center core grants would be reduced by 10 percent more than the cuts they already have taken from recommended levels.**
**4. A total of 30 centers, including the 16 cancer centers, which are supported by NIH, would be dropped from funding.**
**5. The NIH Div. of Research Resources would cut $20 million from the Biomedical Research Support Grant Program.**
**6. Stipend increases for research trainees would be eliminated, and the total number of trainees would be held to the 1983 level.**
**7. All noncompeting grants (except those earmarked for greater cuts) would be reduced by one percent more than they have been.**
**8. Indirect costs would be reduced by an additional $72 million.**

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Weicker complained about getting the budget revisions so late. "We received this on Friday night," he said. "This is a complex budget, and giving it to us with no time to consider it assumes that we're going to go ahead and swallow it. I have too much respect for the work of NIH, to proceed in that fashion."

Wyngaarden defended the revisions which he said were necessary "to emphasize stability in the research project base. Pursuit of fundamental knowledge is the foundation of progress in the health sciences, and investigator initiated research holds the greatest promise of significant discovery. . . .

"To maintain a relatively stable level of research project grants will require continued shifts in support from other mechanisms, as well as aggressive efforts to hold down the average cost of grants. In 1982 and 1983, we were able to reduce the costs by approximately four percent in noncompeting grants. In the case of new and competing grants, we have negotiated about seven percent below study section recommended levels. . . .

"In order to fund the 5,000 grants, we will again

conduct downward negotiations in noncompeting grant average costs and make reductions from study section recommended costs for new and competing grants. We will fund most other mechanisms at approximately the 1983 level. Two exceptions are the research centers program and biomedical research support grants where the proposed funidng levels are below 1983."

Wyngaarden also said that indirect costs will be cut further, by about $72 million.

Weicker questioned the advisability of funding grants at less than recommended levels. Although the 1,300 additional grants would require $184 million if fully funded, he noted the Administration proposal earmarks only $149 million for them, reflecting the reduction from recommended levels. "It seems to me that the investments are not being made to show results in the out years," Weicker said.

"That is precisely why we are giving research project grants top priority," Wyngaarden said.

"But even there, they are being pulled down," Weicker said.

"Pulled down only slightly," Wyngaarden insisted.

"I'm not interested in funding 5,000 grants for rhetoric purposes," Weicker said. "Maybe we should have fewer, and do them right. What if I could find you more funds, from without NIH?" Weicker asked.

"We're not asking for additional funds," Wyngaarden said, accepting as gracefully as he could the role of the Executive Branch team player defending a budget he knows to be inadequate.

NCI Director Vincent DeVita also was forced to play that role, although he did so with noticeably less enthusiasm than he has in previous years. In addition to the ax taken to centers, the budget revision cut $2.5 million from the $989 million requested for NCI in the January budget. Once again, NCI was singled out for a substantial cut while other institutes were not, an action which in the past has driven DeVita into open criticism of the NIH/HHS/OMB hierarchy.

Pressed by Weicker on the impact of the centers cuts, DeVita pointed out that as much as one third of center core grants supplies services required by other grants.

"That poses a problem, doesn't it, in terms of bottom line results?" Weicker commented.

"Yes," DeVita said. "The essence of the Cancer Program, supported by the 1971 Act, is the support of both basic and applied research. We've tried to maintain a balance, with the first priority being basic research."

Responding to a question from Weicker, DeVita said, "It will not be possible to continue to support some research projects at less than full funding. Some work going on with oncogenes is so exciting, and represents such a big leap forward, that it should be fully funded."

The threat to centers has to be especially galling to DeVita, who over the years has assured center executives that the Cancer Centers Program is one of his highest priorities. Only last month, he told center directors that he would like to see an additional 30 centers established around the country when the money is available (***The Cancer Letter,*** March 18). At the dedication of the Kenneth Norris Jr. Cancer Hospital & Research Institute at USC, DeVita called comprehensive cancer centers "a jewel in the crown of the National Cancer Program."

The flurry and fury brought on by the budget revisions overshadowed other possible controversies which might have come up. Not a word was mentioned about the Organ Systems Program, although NCI executives were prepared to defend the new arrangement.

## CHABNER OBJECTS TO YARBRO'S REMARKS ON FEDERAL ROLE IN CLINICAL RESEARCH

Bruce Chabner, director of NCI's Div. of Cancer Treatment, took exception to remarks made by John Yarbro at last month's meeting of the Assn. of Community Cancer Centers (***The Cancer Letter,*** March 25). Yarbro, professor of oncology at the Univ. of Missouri and president elect of ACCC, criticized what he contended is the increasingly burdensome and stifling regulation of clinical research by the federal government.

Chabner, who was not at the meeting, responded in a letter to Yarbro:

"I have read your recent speech to the ACCC concerning the meddlesome role of the federal 'bureaucracy' in cancer research. Your remarks were so personally directed against our fine staff in the extramural clinical trials area that a response must be made.

"There is no doubt that we all would prefer to have the least amount of regulation compatible with the safety of patients involved in trials. The recent tightening of procedures for review of protocols and informed consent documents by the NCI staff has resulted from a general consensus among the public FDA, and Congress, that the health consumer must be fully informed as to the consequences and benefits of proposed treatment.

"As the agency responsible for awarding funds for publicly supported cancer research trials, it is our legal, as well as logical responsibility to review research protocols. This activity can hardly be regarded as meddling on our part. In addition, we do have a recognized substantial role in determining the scientific direction of the cooperative groups, a role agreed to by the cooperative groups themselves.

"How have we executed their functions in the past

year? We have returned a small number of protocols which had inadequate consent forms, but have not disapproved a single protocol on the basis of scientific direction. It is pertinent to note that the groups would be free to carry out the protocol if disapproval by NCI were based solely on scientific grounds and not on the basis of patient safety. Thus, in theory as well as practice, the NCI staff has 'interfered' very little with the pursuit of research by cooperative groups. I might add that we have had a very good working relationship with the group chairmen and regularly seek their advice on important issues. I regret if the NCI staff has caused undue problems for you personally, although we are unaware of any problems related to submission of protocols from your institution. The only protocol submitted to us by the Univ. of Missouri in the past year is currently under review by the Biochemical Modulators Advisory Group, and we have received no complaints about the progress of this review from the principal investigator.

"Secondly, I would like to point out that the 'kids' at NCI responsible for protocol reviews are in fact distinguished investigators in their own right, with considerable experience in clinical trials research, and a dedication to the mission of furthering and facilitating your efforts. Our new associate director for the Cancer Therapy Evaluation Program, Bob Wittes, is internationally recognized for his work on lung, head and neck, and testicular cancer. I need not defend the record of previous CTEP directors, Franco Muggia, John MacDonald, nor their staff.

"The younger members of the CTEP staff who are responsible for protocol review are without exception fully trained medical or pediatric oncologists. Suffice it to say that I am sure many universities would be delighted to recruit a comparable group to their oncology units. To their credit, and to the benefit of all of us, these people are willing to devote their careers to the development of a publicly supported system for conducting cancer research trials. In my opinion the current system, incorporating assurances for patient safety and for the quality and accuracy of data, will be no less productive than it has been in the past.

"I would stoutly defend the accomplishments of the cooperative groups in the past 20 years. Their achievements in childhood and adult acute leukemia, the pediatric solid tumors, and polycythemia vera, and adjuvant studies of rectal and breast cancer, to mention a few, have been outstanding. In addition there have been indispensable contributions in affirming and extending the initial observation of individual investigators regarding some of the curative regimens you have mentioned.

"Finally, and I am sure you are aware of this, the existence of the groups has provided a framework for the participation of both academic and practicing oncologists in high quality treatment protocols, an advantage which will accrue to community oncologists through the CCOP program so strongly supported by ACCC. Approximately 80 percent of CCOP applicants have chosen to affiliate with cooperative groups as thier research base. Apparently, the ACCC members do not share your view of the 'weakness' of cooperative group research.

"I would like to point out additional errors in your speech regarding 'contracts'. You have stated the opinion that contracts produce 'garbage', and yet in the same speech mistakenly ascribe the highly valuable adjuvant breast studies to cooperative group research. In fact, both NSABP and Milan were contract supported at the time of their initial studies, and Milan still is. In fact, clinical contract research is not growing with funds diverted from grant programs, but now consists only of phase 1-2 studies and a very few specialized areas such as the Milan breast studies. The overall contracts budget in CTEP now stands at $5.1 million as compared to $13.5 million in 1978. In that same five year period, R01 and P01 grants in the treatment area have not 'faded a bit', as you allege, but have increased steadily from $27.5 million in 1978 to a projected $39.5 million in 1983.

"Finally, I would like to correct a surprising misconception expressed in your speech. Study sections most certainly do review proposed research. As a study section member for four years, I can attest to that point. Outstanding past performance does not assure continued funding, as most grantees know, although of course it helps. You might be interested to know that beginning this year, the cooperative group applicants will be awarded an overall priority score which will be based on past performance and future plans.

"Let me conclude my reply by affirming that we greatly value the participation of community cancer centers in cancer treatment research. Unfortunately, remarks such as yours, which unfairly criticize the NCI staff, can only hurt this relationship by raising the traditional straw men of 'bureaucrats' and 'regulators'. Certainly you must know enough about us in professional terms to realize that I and my staff have higher priorities than regulation. I would welcome the opportunity to discuss these priorities with you personally and with the ACCC at your convenience."

## REQUEST FOR APPLICATIONS

### RFA-NCI-DCCP-82-18

**Title:** *Hepatitis B virus and primary hepatocellular carcinoma: Biological investigations of virus-host interactions and mechanisms of causation of human cancer*

**Application Receipt Date:** *July 15, 1983*

The Div. of Cancer Cause & Prevention of NCI invites grant applications from interested investigators for biological investigations of hepatitis B virus

host interactions and mechanisms of causation of human cancer.

Hepatitis B virus is known to cause acute and chronic hepatitis, very probably cirrhosis, and there is very strong epidemiological evidence to indicate that persistent hepatitis B virus infection is associated with subsequent development of primary hepatocellular carcinoma in man. This linkage was discussed at an NCI conference on hepatitis B virus and primary hepatocellular carcinoma held May 3-4, 1982.

Although the role of the virus in the pathogenesis of any of these diseases is not clearly understood, some important phenomenological data has been accumulated, i.e., the long period from 20 to 30 years between the onset of persistent infection with the virus and development of liver cancer; the observation that males are more likely than females to develop chronic liver disease and primary hepatocellular carcinoma; and that infants are more likely to develop persistent infection and adults to develop transient infections. The existence of 210 million chronic carriers of HBV worldwide coupled with recent data which indicates that the lifetime risk of developing liver cancer in these individuals may be approximately 40 percent indicates that primary hepatocellular carcinoma is a major public health problem wordwide.

Conference participants generally agreed that NCI should be involved in studies of hepatitis B virus and primary hepatocellular carcinoma since this agent was thought to be the best model in humans of a specific viral agent related to a specific cancer. They felt that the epidemiologic evidence linking the two was overwhelming but the basic knowledge of how the virus acts to cause disease or even whether or not it is a transforming agent is completely lacking. Thus both basic and clinically oriented studies should be pursued to gain information on the mechanism(s) by which the virus is causally implicated in the disease and to enable meaningful planning for intervention and prevention of hepatocellular carcinoma in man.

The intent of this RFA is to encourage (1) studies to determine whether or not the hepatitis B virus is a complete carcinogen in cultured human liver cells or in animal model systems; (2) investigations on the mechanism(s) of oncogenesis of HBV including the role of integrated DNA in transformation, examination of virus coded proteins for transforming potential and development of in vitro model system(s) for transformation; (3) studies on the progression of acute hepatitis through chronic hepatitis to primary hepatocellular carcinoma, including studies on why tumors develop in only a limited number of individuals infected with the hepatitis B virus (possible host determinants to the process) and in the mechanism(s) by which chronic infections are maintained in the immunologically competent host; (4) studies on the site of pathology of the disease to shed light on the mechanism(s) of liver damage and carcinogenesis.

Responsibility for the planning, direction and execution of the proposed research will be solely that of the applicant. The intent is to fund multiple projects, with total costs amounting to approximately $900,000 for the first year. It is anticipated that awards will be made for a period of up to four years. This funding level is dependent on the receipt of a sufficient number of applications of high scientific merit.

Applications must be submitted on form PHS 398 (Rev. 5/82), the application form for research project grants. Application kits are available at most institution business offices, or may be obtained from the Div. of Research Grants (DRG), NIH.

The number and title of this RFA should be typed in section 2 on the front page of the grant application form.

The completed original application and six copies should be sent or delivered to Div. of Research Grants, NIH, Westwood Bldg. Rm. 240, 5333 Westbard Ave., Bethesda, Md. 20205. An additional two copies should be sent to Dr. John Cole, Biological Carcinogenesis Branch, Landow Bldg. Rm. 9A22, Bethesda, Md. 20205, phone 301-496-6085.

One copy of this application should also be sent to Dr. Harold Waters, DRG, NIH, Westwood Bldg. Rm. 2A16, Bethesda, Md. 20205.

## PROGRAM ANNOUNCEMENT

### Non-Invasive Approach for Detection of Lung Cancer

The Diagnosis Branch of NCI is inviting grant applications from interested investigators for pilot studies involving the use of gas chromatographic-mass spectrometic techniques for the chemical analysis of the volatile organic components of human expired air in an attempt to identify and quantitate characteristic constituents associated with lung cancer which may have potential for early diagnosis of this malignancy. Profiles or patterns from lung cancer patients should be distinguished from those of patients with pulmonary granuloma, pneumonia, chronic bronchitis, bronchiectasis, emphysema and other associated pulmonary diseases. The technology is available and capable of automation if pilot studies suggest that larger studies would be worthwhile. This could provide a noninvasive method for the identification of persons at high risk and those with early pulmonary tumors who would benefit from further diagnostic tests.

The high mortality of lung cancer is felt by many to be due to late diagnosis. Because current screening methods by sputum cytology and chest radiography, individually or in combination, do not provide convincing evidence that this dilemma can soon be resolved, other approaches to detection must be sought. Findings from studies in physiological chemistry

show that the composition of expired air in health reflects amounts of all volatile constituents in the blood, and that in disease it would include those compounds which are intimately associated with pathologic quantitative information not only of the disease processes but may also serve as chemical signals for early detection and diagnosis of disease states of the body.

Preliminary data is already available on normal profiles for correlation with the disease state. Other studies have documented the significance of this technique in detecting chemical exposure. These proposed studies would be a first step in evaluating volatile components in expired air to assess their value in the diagnosis of lung cancer. Lung cancer patients would be compared with benign lung disease patients and healthy matched controls. The study would also look for correlations between the magnitude of any marker compounds and the estimate of tumor burden.

Applications should be submitted on form PHS 398. There are three receipt dates each year for new applications: March 1, July 1 and Nov. 1. Review and award of the successful applications will be in accordance with the usual NIH procedures governing research grants. Funding decisions will be based upon scientific merit, program relevance and the Institute's ability to fund.

The title of this program announcement should be typed in Section 2 on the front page of the grant application form. The original and six copies of the application should be sent or delivered to Applications Receipt Office, Div. of Research Grants, NIH, Westwood Bldg. Rm. 240, Bethesda, Md. 20205.

In order to alert the Diagnosis Program to the submission of proposals as requested above, copies of the face page and summary page of such applications should be forwarded under separate cover to Robert McIntire, MD, Chief, Diagnosis Branch, Program Director, Diagnosis Program, Div. of Cancer Biology & Diagnosis, NCI, Bethesda, Md. 20205, phone 301-496-1591.

Additional information regarding the program may be obtained by contacting McIntire.

## PROGRAM ANNOUNCEMENT

### Specific Immunoassays for Cancer Associated Isoenzymes

The Diagnosis Branch of NCI is encouraging submission of individual research grant applications for studies involving the development of sensitive quantitative assays using monoclonal antibodies which could accurately identify and monitor levels of various isoenzymes that have been shown to be quantitatively increased in certain cancers. The objective of this research would be to determine the value of analyzing isoenzymes levels in the serum as potential diagnostic and prognostic tumor markers. Efforts should be made to relate specific isoenzymes to given tumor types and demonstrate a correlation with changes in tumor mass.

A large number of isoenzymes have been linked with human cancer. However, there are many inconsistencies in the data, some of which may be due to variations in the specificities and cross-reactivities of the antibodies, others to problems in detecting low but still abnormal levels in serum by classical electrophoretic and staining techniques. In addition, some of the isoenzyme forms in tumor extracts have similar charges, hence, cannot be easily distinguished by electrophoresis alone. Monoclonal antibodies directed against the individual forms should help distinguish them.

Some isoenzymes which are known to have structural differences have not been distinguished by classical immunological techniques using zenogeneic antisera. Monoclonal antibodies could have the necessary specificity to distinguish these forms, allowing the cancer associated isoenzyme to be used as a tumor marker. Minor changes unnoticed by earlier techniques might indicate antigenic forms of the enzyme specific for a particular tumor.

There is a need for developing antibodies that recognize isoenzymes with great specificity and are not dependent upon functional activity or physicochemical properties of the enzyme for that specificity. Monoclonal antibodies have become very powerful new tools in biology and medicine since the hybridoma technique was first described by Kohler and Milstein. The development of these antibodies would provide the technology for the production of antisera with the built-in ability to insure reproducibility of results for unlimited numbers of tests. The hybridoma technique is widely used for detection of tumor related surface antigens. However, little is being done to exploit its potential use in identification and quantitation of cancer associated enzymes. This announcement is a step in stimulating research in this direction.

Applications should be submitted for the previous program announcement, with the required number of copies to DRG and McIntire.

## ANNOUNCEMENT

### The NCI Clinical Investigator Award

**Application Receipt Dates:** *June 1, Oct. 1, Feb. 1*

NCI announces the availability of Clinical Investigator Awards for the purpose of developing physician researchers in basic and applied cancer sciences. The initiation of this award is intended to encourage recently trained highly qualified physicians (MD or DO) to undertake careers in cancer research. The award is prompted by the chronic shortage of physician investigators, particularly surgical oncologists, radiation oncologists, preventive oncologists, physiatrists, nutritionists and epidemiologists. It is ex-

pected to facilitate the awardees' transition to independent basic or applied research. The award will enable successful candidates to investigate for up to three years a defined cancer problem under the guidance of an active researcher who has the knowledge, background and research experience required to be a mentor in that field.

Applications may be made by institutions on behalf of candidates who hold the MD or DO degrees. Those who hold a PhD or comparable research degree, either with or without an accompanying MD or DO, are not eligible for the Clinical Investigator Award, nor are candidates who are or have been principle investigators on PHS supported research grants, program projects or new investigator awards.

Candidates should have at least two years of clinical training at the postdoctoral level by the projected start of the award, but should not have more than seven years postdoctoral experience at the time of application for the award. In exceptional circumstances, people having less than two, or more than seven, years' postdoctoral experience may qualify for the award. However, the applicant must provide a very powerful justification for such an exception. Candidates must provide evidence of a serious intent to enter upon an academic research career.

Only United States citizens, nationals or permanent residents may be presented as candidates for this award.

The sponsoring institution must have a strong, well established research program in the candidate's area of interest, and experienced faculty members in the clinical and basic departments relevant to the candidate's proposed training. The institution must include a plan for the candidate's research and academic development. Only domestic institutions are eligible.

The candidate's primary preceptor must be a competent investigator in the area of the candidate's proposed research activity. The preceptor must be active currently as an investigator, and must be prepared to provide personally much of the candidate's research supervision. The award is intended to provide an intensive, supervised research experience for the successful candidate.

The Clinical Investigator Award is made for a maximum nonrenewable and nontransferable period of three years. Support is based upon a fulltime, 12-month staff appointment. The award will provide salary support not to exceed $30,000 annually from NCI funds for the three year period. The actual salary must be consistent with the established salary structure of the grantee institution for persons of equivalent qualifications, experience, and rank. Up to a total of $10,000 annually will be provided for supplies, equipment, travel, etc., which are necessary for pursuit of the awardee's research program. Funds will be provided for the reimbursement of indirect costs at a rate not to exceed eight percent of the total allowable direct costs. When requested, the grantee institution's share of the fringe benefits may be paid as a direct cost (if not treated as an indirect cost) on that portion of the employee's salary provided by the NCI Clinical Investigator Award.

It is expected that the candidate will spend at least 75 percent of his/her time in research during the period, with the remainder being divided among other activities such as teaching, pertinent clinical training, research training, and academic studies. An appropriate sponsor must assume responsibility and provide guidance for the research development in the chosen areas.

Institutions may apply for awards on behalf of named individuals meeting the above criteria. It is not essential for the applicant institution to commit itself in the application to eventual placement of the candidate on its permanent, full time faculty, but it is expected that institutions will choose candidates who will be able to meet the criteria for making that decision. Evidence of the commitment of the institution to the candidate's research development must be provided.

Candidates for this award may not concurrently apply for a Research Career Development Award, an Academic Award or a New Investigator Research Award.

Candidates must be nominated by an institution on the basis of qualifications, interests accomplishments, motivation and potential for an academic or research career. Candidates must have one or more sponsors at the institution who are recognized as accomplished researchers or teachers in the candidate's area of proposed development. The sponsor(s) must provide (1) his/her concept of a development and research plan for the candidates; (2) his/her updated curriculum vitae with a complete bibliography and research support; and (3) a letter indicating willingness to provide guidance and support for the award's duration.

Candidates must provide a full description of the proposed research and career development plan for the three year period of the award. The candidate must be prepared to commit full time effort to the objectives of this award. Candidates must agree to inform NCI annually for a period of 10 years subsequent to completion of the award about academic status, publications, and research grants or contracts received.

Applications for the NCI Clinical Investigator Award receive initial technical merit review by an NCI review committee and secondary review by the National Cancer Advisory Board. Criteria for review include: The candidate's potential for a career in independent research; the candidate's commitment to a research career; the overall merit of the candidate's three year plan for research and the development of research skills; the quality of the candidate's

clinical training and experience; the institution's ability to provide quality facilities, resources, and opportunities necessary to the candidate's research development as indicated in the application; the quality of the faculty in the departments relative to the area of study; the ability and plans of the sponsor(s) who will guide the candidate in his career development; and the candidate's conformance to the eligibility requirements discussed earlier.

Application for this award should be made on form PHS 398 (Rev. 5/82). At the time the required number of applications are submitted to the NIH Div. of Research Grants as indicated in the instructions in the application kit, send a copy to Barney Lepovetsky, PhD, JD, Chief, Cancer Training Branch, Div. of Resources, Centers, and Community Activities, Blair Bldg. Rm. 717, 8300 Colesville Rd., Silver Spring, Md. 20910, phone 301-427-8898.

## RFPs AVAILABLE

*Requests for proposal described here pertain to contracts planned for award by the National Cancer Institute unless otherwise noted. Write to the Contracting Officer or Contract Specialist for copies of the RFP, citing the RFP number. NCI listings will show the phone number of the Contracting Officer or Contract Specialist who will respond to questions. Address requests for NCI RFPs to the individual named, the Blair building room number shown, National Cancer Institute, 8300 Colesville Rd., Silver Spring, Md, 20910. RFP announcements from other agencies reported here will include the complete mailing address at the end of each.*

### RFP NCI-CO-33933-30

**Title:** *An assessment of the factors affecting critical cancer research findings*

**Deadline:** *May 23*

NCI is seeking small business sources capable of responding to a request for proposals to perform a study of the factors affecting critical cancer research findings in the period covering 1972-1982.

The purpose of this study is to determine who have been the principal contributors to selected advances in cancer research in the period 1972-1982, how they have been supported (i.e., contracts, grants), and where they performed their work, so as to determine if a significant relationship exists between the research event, the funding mechanism, and the location of the performer.

Eight to 10 major advances in cancer research during the past 10 years are to be identified for inclusion in this study; e.g., reverse transcriptase and recombinant DNA technology; split genes and regulation of normal cell processes; adjuvant breast cancer treatment with minimal surgery; combination treatment of testicular cancer.

There is a variety of methods to identify cardinal advances in cancer research such as bibliometric, citation indexing, content analysis, and other techniques that will be used. The proposed approaches for performing the study will be an important part of the offeror's proposal.

The proposed procurement listed herein is a total set aside for small business concerns. A small business for purposes of this procurement is a firm, including its affiliates, that is independently owned and operated, is not dominant in the field of operations in which it is bidding on government contracts, and that has 500 employees or less.

**Contract Specialist:** Elsa Carlton
RCB, Blair Bldg. Rm. 314
301-427-8745

### RFP NCI-CP-31019-78

**Title:** *Laboratory rodent facility*

**Deadline:** *May 31*

NCI has a requirement for a contractor to house, care for, and conduct experiments with the following: 2,000 mice, 1,000 rats and 500 hamsters or gerbils. The place of performance of this contract must be within a 50 mile radius of the Frederick Cancer Research Facility in Maryland. This effort is currently under contract with Microbiological Associates.

The contractor's facility shall be used chiefly for long term treatment, holding, observation and necropsy of animals in carcinogenesis investigations emphasizing lifetime tumor induction in rodents and related activities. The facility must satisfy NCI guidelines for safety of personnel handling chemical carcinogens to be administered to animals by skin painting, gavage, parenteral injection, or intratracheal instillation.

**Contracting Officer:** Elizabeth Osinski
RCB, Blair Bldg. Rm. 117
301-427-8888

## NCI CONTRACT AWARDS

**Title:** Expert panel to review monographs on carcinogenicity of drugs and cosmetics

**Contractor:** Federation of American Societies for Experimental Biology, Bethesda, Md., $217,602.

**Title:** Support to the Diet, Nutrition & Cancer Program

**Contractor:** Capital Systems Group, Inc., Kensington, Md., $902,107.

**The Cancer Letter** _Editor Jerry D. Boyd

Published forty-eight times a year by The Cancer Letter, Inc., P.O. Box 2370, Reston, Virginia 22090. Also publisher of The Clinical Cancer Letter. 