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ETTER

DOD Should Transfer Part Of Breast Cancer \$\$ To NIH For Peer Distribution, Broder Says

The Department of Defense should make a portion of its \$210 million appropriation for breast cancer research available immediately to NIH to fund basic research proposals, NCI Director Samuel Broder said.

Speaking to an NCI advisory group this week, Broder took a more pointed stance than he has in recent weeks on the allocation to the (Continued to page 2)

<u>In Brief</u>

THE

McDonough Leaves Komen Foundation; Henderson To Head Salk Institute; Alabama Recruits Two

PATRICK McDONOUGH will leave the Susan G. Komen Foundation as executive director and is returning to private business. "I have completely enjoyed my association with the Komen Foundation and am extremely proud of what we have accomplished in the last couple years," McDonough wrote in letters to colleagues last week. "We have increased our Race for the Cure events from 12 to 33 races since 1991 and our national chapters have grown from five to 22 by this year's end." . . . BRIAN HENDERSON, director of the Univ. of Southern California's Kenneth Norris Jr. Comprehensive Cancer Center since 1983, has agreed to become president of the Salk Institute, in San Diego, as of Feb. 1. Henderson succeeds Renato Dulbecco, Salk's president since 1988. Henderson said he plans to split his time between administrative responsibilities and research on cancer epidemiology and prevention. . . UNIV. OF ALABAMA at Birmingham Comprehensive Cancer Center has recruited two prominent researchers on the human papillomavirus. Thomas Broker and Louise Chow, of Univ. of Rochester, have joined the faculty as senior scientists. They will establish a cervical cancer research program. . . . KENNETH TREVETT, general counsel of Dana-Farber Cancer Institute, was elected executive vice president and president-elect of the Assn. of Independent Research Institutes. He will assume the presidency in Oct. 1993 for a two-year term. The association is made up of more than 80 not-for-profit independent research organizations. . . . MICHAEL ASTRUE, general counsel of the U.S. Dept. of Health and Human Services, has joined the law firm Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, which is known for its health care and health sciences law practices. . . . CORRECTIONS: Board certification in gynecologic oncology began in 1974, not 1994 as reported in The Cancer Letter Oct. 30. Also, a Nov. 20 story on taxol reported that in NCI's Treatment Referral Center protocol, 42 percent of patients received a lower dosage. This should read 42 patients, or 9 percent.

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NCI To Ask Cancer Panel, NCAB, To Help Respond To Request For Review Of National Cancer Program

... Page 3

Final Stats On FY92 Budget: Success Rate Was 35 Percent ... Page 4

DCBDC Board Approves Expansion Of SPORE Program To GI Cancers; Okays Two Other RFAs

NCI To Recompete Contracts For Frederick ... Page 7

NIH Funding Strategies; UICC Fellowships ... Page 8

Broder To DOD: Give NIH A Portion Of Breast Cancer Funds Immediately

(Continued from page 1)

Army, which Congress included in the fiscal 1993 DOD appropriation.

"We would save everyone a lot of trouble if a certain amount of the funds were released immediately to the NIH peer review process," Broder said. "We feel the money should be made available now for immediate allocation through peer review. NIH, and in particular, NCI, should have a portion of that money."

Calling the appropriation a "reverse peace dividend," Broder said to a meeting of the Board of Scientific Counselors of the NCI Div. of Cancer Biology, Diagnosis & Centers: "We think the armed forces have a very important role in defense of our country against armed aggression, and we think NCI has an important role in breast cancer research. We certainly don't want our own B2 bomber program."

Broder said he has met with Major General Richard Travis, commander of the U.S. Army Medical Research and Development Command (USAMRDC), where the Army breast cancer funds are located.

"The Army is working in good faith and they want to do the right thing, but they did not ask for this money," Broder said. "What I told Gen. Travis was, any credible advisory group will have as an exceedingly high priority basic research, and for something as complex as breast cancer there is a great deal more we must know about prevention. . . . Any recommendation that did not include basic research would be dead on arrival."

"What I did tell Travis was, it is a mistake to assume there would be a project you could conduct in two years that would accomplish something that would have a major impact," Broder said. "Therefore, you would not accomplish what I think was the spirit of

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the program, which was a lot of basic research."

Army: Goal Is No Duplication

A spokesman for Travis said the general's staff is in the process of developing a spending plan for the unusual appropriation and is meeting privately with individuals for advice.

"The goal is not to duplicate stuff that is already being done, but to find gaps in current efforts and fill in, and do work that NCI or NIH haven't done," the spokesman said to **The Cancer Letter**. "It requires that we find out what is going on in breast cancer research."

In FY92, the Army received \$25 million for breast cancer research, and contracted with the American Institute of Biological Sciences, based in Washington, to conduct the peer review.

In an early plan that circulated around Capitol Hill soon after the FY93 budget was finalized, DOD said it could use the funds for short-term, high-technology research emphasizing mammography and other imaging techniques (**The Cancer Letter**, Nov. 6).

DCBDC Board member Ross McIntyre said he had been involved as a subcontractor on an unsuccessful grant proposal submitted for the FY92 Army breast cancer funds. "We must prevail [to move some of the funds to NIH] otherwise we are going to misspend and waste this money," he said.

"It took a long time to evolve the NIH system [of peer review]," Broder responded. "It is a remarkable system. I really believe that the system has to be protected. You could establish a tradition [outside of NIH] that would not necessarily be in the best interests of science.

"If there are problems in the NIH system, then we should fix them," Broder said. "The NIH system should not be taken for granted."

Board member Albert LoBuglio asked whether there was a message from Congress "that they are looking for alternative funding mechanisms."

"I don't believe there was an invidious message sent to us," Broder said. NCI breast cancer research funding has grown 177 percent in past three years, he said. "We are doing what we can."

The Army received the funds as a result of rushed dealmaking in the final days of the 102nd Congress as legislators sought creative ways to increase breast cancer funding to please politicized breast cancer patients.

Don't Need More Mammography Machines

"What we want from this research, in the optimal setting, is not building new mammography equipment, though there is a role for new imaging technologies, but putting in more mammography machines is not going to increase our knowledge," Broder said. "It will do nothing to affect the true incidence. We need to develop true prevention."

"Now, I don't want to read in...**The Cancer Letter** that I am opposing mammography, but I can't say that if we build better mammography equipment it will have a significant effect," Broder said.

In remarks to **The Cancer Letter** last week, Broder said he appreciated any increase in funding for cancer research, but questioned whether the Defense Department was the most optimal location for the money.

"I think the best program for cancer is the National Cancer Program," he said. "The National Cancer Program is not brick and mortar, it is far flung, involving every institute in the country. It was constructed with great care and is poised to do research. We have in our fiscal 1994 bypass budget a lot of activities planned. We're primed to move."

News Roundup

Cancer Panel, NCAB, To Help Broder Respond To Cancer Program Review

NCI will ask the President's Cancer Panel and the National Cancer Advisory Board to help the Institute respond to a request from Congress for a review of the National Cancer Program, NCI Director Samuel Broder said this week.

House and Senate Appropriations Committees, in their reports on the FY93 budget, used different language, but made similar requests for a review of progress over the past 21 years since the signing of the National Cancer Act of 1971, and recommendations for the future.

"While the Institute is to be congratulated on many breakthroughs in molecular biology and other basic cancer research areas, the committee must express its impatience with the lack of overall progress," the House report said (**The Cancer Letter**, July 31). "In 1971, 336,000 Americans died of cancer and the ageadjusted death rate from cancer was 162 per 100,000. This year more than 500,000 Americans will die of cancer and the mortality rate will have increased by 8 percent. While there have been declines in deaths from certain cancers, particularly those affecting children, rates among the elderly, the poor and minorities continue to rise."

'Reach Beyond Cancer Establishment'

The House committee said it "encourages the director to reach beyond the current cancer establishment as part of a fundamental review of the

research program sponsored by the Institute. The committee looks forward to testimony from the director on his views regarding the need for such a review and the best mechanism for carrying out such a study. The committee believes this review must be separated from any debate about specific funding levels if it is to be effective."

The Senate committee called for creation of an independent panel to evaluate the cancer program.

"The time is right to assess the achievements of the National Cancer Program, to reinvigorate our National Cancer Program, and to put forth a new plan to carry us into the next century," the Senate said. "The committee recommends that the director review the establishment of a knowledgeable and independent panel to undertake an evaluation of the achievements of our National Cancer Program relative to the investment to date."

Subjects the Senate said should be reviewed include the opportunities for research; development of a plan for research across the broad spectrum from basic biology to applications; cancer control efforts including the distribution and quality of preventive services, screening, diagnosis and treatment, aftercare, and rehabilitation; barriers to state-of-the-art cancer treatment in some populations, particularly minorities and older Americans (**The Cancer Letter**, Sept. 18).

'We Can't Get Defensive'

"We have convened a number of groups that are looking at this," Broder said to a meeting of the Div. of Cancer Biology, Diagnosis & Centers Board of Scientific Counselors this week. "We will be asking the President's Cancer Panel to help us with this project, and the National Cancer Advisory Board. We could convene another group. We also use the bypass budget as a planning document, to identify areas of progress and where progress can occur."

Asked whether he would establish a separate, independent panel as requested by the Senate, Broder said to **The Cancer Letter**, "We will explore ways of responding. I don't want to make a commitment to one way of responding."

The President's Cancer Panel's Special Commission on Breast Cancer "is a good model" and includes some individuals who are not part of the "cancer establishment," such as patient activists, Broder said.

"Maybe we can explore other ways of building on that," he said. "There may be multiple approaches."

Congress has always shown interest in the progress against cancer, Broder said.

"Are we making progress, is the public being wellserved? Obviously, I think the answer is yes, and we have to respect the right of Congress to ask those questions. We can't get defensive about it."

The cancer program was established as a direct result of a similar Senate request. In 1970, Texas Sen. Ralph Yarborough asked Benno Schmidt Sr. to chair a National Panel of Consultants to develop recommendations for a new initiative for federal support of cancer research. The panel's report, issued within six months, led to legislation that eventually became the National Cancer Act of 1971.

Public Hearings Proposed

In a related development, the NCAB's Subcommittee on Information and Cancer Control has proposed that the board conduct four or five "public participation hearings" around the country in late 1994 or 1995, similar to the hearings the board held in 1987-88.

The hearings would showcase local activities in support of NCI's cancer control objectives, and identify gaps. The hearings cost \$300,000, took a year to plan, and, in a final report on the effort, the NCAB made eight recommendations for expanding private sector cancer control activities. At the NCAB meeting in September, the subcommittee also favored holding a second round of regional breast cancer "summits," sponsored this year by NCI and the Susan G. Komen Foundation.

The board's newest subcommittee, Interactions with Voluntary Organizations, is involved in an effort to broaden participation in the breast cancer summits to include other organizations. The subcommittee planned to invite the American Cancer Society and the National Coalition for Cancer Survivorship to its meeting this month to discuss collaboration.

End of a good thing: FY92. Broder provided the board with final statistics on the best year for research projects grants since 1979, the Institute's last "high water mark."

NCI funded the largest number of research project grants ever, 1,070 new and competing grants, for an overall success rate of 35 percent.

"The party's over," Broder said. Expected success rate for FY93 is around 28 percent.

NCI also awarded 60 Shannon grants, which are drawn from applications that fall just below the payline. Half of the funding for these small grants comes out of the NIH director's office. NCI provided \$6 million in matching funds for these grants. This program is expected to continue in FY93, and sources say Healy is considering "institutionalizing" the program by establishing a "junior R01."

"We think the [Shannon award] program is fair and we get our fair share," Broder said. "I think the program is well received. It's another way of allocating money, and is a modulating influence for the vicissitudes of peer review."

Balancing its \$1.946 billion FY92 checkbook, NCI managed to allocate 99.99 percent of its budget for the fiscal year ended Sept. 30, with a "lapse"--money that didn't get spent--of \$14,000. Those funds go back to the Treasury and are never seen again, but it is better than going over budget, Broder indicated. He called this "an astonishing administrative accomplishment. And I had nothing to do with it."

FY93 appropriation of \$1.991 billion is a \$43.8 million increase, only 2.2 percent, over last year. Adding up all of the requests for specific new commitments in the House and Senate budget reports, Broder said Congressional earmarks total \$105 million, or \$61 million more than the new money.

"We cannot achieve all of the earmarks, but we will do the very best we can," he said.

Specific funding levels within NCI have not received NIH approval as yet, Broder said.

DCBDC Board Okays Expansion Of SPORE Concept To GI Cancer

NCI plans to expand its new Specialized Programs of Research Excellence (SPORE) mechanism to include two awards in gastrointestinal cancers.

Two months ago, NCI named the recipients of the eight charter SPORE grants in breast, prostate, and lung cancer. The Institute also funded 12 SPORE feasibility grants. Altogether the NCI allocated \$17.5 million to the program in FY92 (The Cancer Letter, Oct. 9).

NCI's Div. of Cancer Biology, Diagnosis & Centers Board of Scientific Counselors this week voted unanimously in favor of expanding the program to fund two SPOREs for research in gastrointestinal cancers. The board approved the set-aside of \$1.5 million in fiscal 1993, and the same amount for FY94 and 95, to fund two awards of \$750,000 each per year. Grantees could compete for five-year renewal.

The concept for the GI cancer SPOREs is identical to the first SPOREs, except that there is no requirement for addressing career development of investigators.

Following is the concept statement:

Specialized Program of Research Excellence in Gastrointestinal Cancers. Two SPORE awards proposed, total cost per year \$750,000 or a total cost of \$1.5 million. Initial funding will be for three years. Renewal would be for five years subject to successful recompetition. Program director: Andrew Chiarodo, chief, Organ Systems Coordinating Branch.

The objective of this initiative is to establish two Specialized

Programs of Research Excellence in gastrointestinal cancers at institutions that will make a strong institutional commitment to the organization and conduct of these programs. Each SPORE must be dedicated to research on prevention, diagnosis and treatment of human colorectal and pancreatic cancers, and the translation of basic research findings into more applied, innovative research settings involving patients and populations; the SPORE could be used in rehabilitation and quality of life research. Each SPORE must address both colorectal and pancreatic cancer; develop human cancer tissue resources that will benefit translational research in these cancers; develop extended collaborations in critical areas of research need with laboratory scientists and clinical scientists within the institution and in other institutions; and participate with other SPORES on an annual basis to share information, assess scientific progress in the field and identify new research opportunities that may have an impact in reducing incidence and mortality from colorectal and pancreatic cancers. It is expected that each SPORE will support a mix of basic and clinical research. The SPORE mechanism is not intended to support basic research to the exclusion of clinical or applied research.

Gastrointestinal cancers pose a major public health problem in this country. Colorectal cancers accounted for about 15% of all cancer diagnoses in 1991. There were 112,000 cases of colon cancer and 45,500 cases of rectal cancer with 53,000 and 7,500 deaths respectively. Although there have been recent advances in adjuvant therapy, there have been no major breakthroughs in the treatment of colorectal cancers. Animal studies have provided important insights into the etiology of colon cancer, but there have been no major advances in the prevention of this disease. The recent NCI sponsored workshop on colorectal cancer indicated a number of areas where interdisciplinary applications could prove fruitful. Experts from many disciplines addressed prognostic markers, intermediate endpoint markers, susceptibility to colon cancer, polyps, and diet in relation to colon cancer. Interdisciplinary groups considered the science presented at the workshop with specific focus on its relevance for incidence, diagnosis, treatment and prevention. The workshop report and the recommendations of the participants will be valuable information to all SPORE applicants.

Pancreatic cancer remains a significant and intransigent problem. The incidence of this cancer (28,000 cases in 1991) approaches the mortality rate (25,200 deaths). Average survival time from time of diagnosis is less than a year. There have been no advances in understanding the causes of this disease, in detecting or diagnosing it early, and there is no effective treatment. Although there have been recent advances in the biology of this disease, pancreatic cancer remains an intransigent cancer. The NCI is planning a pancreatic cancer workshop to evaluate the state of the science and to identify new approaches to this disease.

In recent years, the scientific information base for gastrointestinal cancers has expanded significantly; however, application of this scientific base to clinical and preventive activities has not been commensurate with this expansion. There is thus a need to encourage translational research that would require interdependence between basic and clinical investigations in both the planning and implementation of research and would emphasize clinical application of basic research findings with patients and populations. There exists significant scientific and clinical expertise in gastrointestinal cancer in NCI-designated cancer centers and other institutions throughout the country. A concerted effort to mobilize this expertise through SPORES can accelerate advances in the management and ultimately prevention of these diseases. The institutions selected for award of SPORES must assemble a critical mass of basic and clinical scientists dedicated to the translation of basic findings into more applied, innovative research settings involving patients and populations with the ultimate objective of reducing incidence and mortality to gastrointestinal cancers. Each SPORE must address human colorectal and pancreatic cancers and must include the following elements:

1. A strong institutional commitment.

Institutions receiving these awards must incorporate the SPORE into its institutional priorities. It must provide a plan which addresses how the institutional commitment will be maintained and sustained and how it will maintain accountability for promoting scientific progress. A SPORE application can originate from an institution with or without an existing P30 core grant. If a P30 already exists, lines of authority should be clearly indicated such that the SPORE does not interfere with the P30 chain of authority.

2. A qualified program leader.

A leader must be selected as the principal investigator who can oversee, conduct planning activities and provide direction to SPORE with a translational research emphasis.

3. A substantive gastrointestinal cancer patient population.

Each SPORE must be a recognized leader in the treatment of gastrointestinal cancers and have access to a patient population that can participate in and benefit from the innovative applied clinical and population research activities of the SPORE.

4. Research projects.

Research projects must be headed by independent investigators and oriented toward translational research activities using human materials and human subjects which address new, innovative possibilities in colorectal and pancreatic cancer research.

5. Specialized resources.

Each SPORE must have a dedicated activity to human gastrointestinal cancer tissue collection. This resource must benefit the specific research activities of the SPORE as well as the research activities of other scientists within and outside the parent institutions who are concentrating on translational research issues, A plan must be proposed for prioritizing distribution of tissues to SPORE scientists and others. The development of other resources of special significance to translational gastrointestinal cancer research is also encouraged.

If the SPORE is part of an NCI-designated cancer center, the development of resources should not duplicate resources already provided by the center on an existing Cancer Center Support Grant (P30). The applicant should show that the P50 will effectively and synergistically interact with an existing P30 where this is applicable.

6. Developmental research funds.

Each SPORE must allocate a significant proportion of its budget and efforts to the conduct of pilot projects that continually explore new innovative ideas in collaboration with scientists within the institution and with other institutions. It is important that SPOREs use developmental funds to stimulate projects that take maximum advantage of new research opportunities. Developmental funds must be used for both colorectal and pancreatic cancer pilot studies.

7. Annual meeting of SPORE.

Gastrointestinal cancer SPOREs will be expected to participate in regular meetings organized by the Organ Systems Coordinating Branch of the NCI to share data, assess progress identify new research opportunities and establish priorities relative to the most effective approaches for reducing incidence and mortality.

If a SPORE is located in an institution that is already an NCI-

designated Cancer Center, the Program Director of the SPORE must be a senior or program leader in the cancer center and the SPORE must be a major programmatic element of the center. However, there must be a separate and distinctive commitment of the institution to gastrointestinal cancer research.

The DCBDC board also approved the following concepts:

Cooperative breast cancer tissue registry. Proposed RFA, \$1.5 million in the first year, six to 10 institutions. Four years. Program director: Roger Aamodt, Cancer Diagnosis Branch.

There is increasing emphasis on the need for better prognostic indicators to predict which patients will benefit from specific therapeutic interventions, which participants can be spared chemotherapy, and which patients are good candidates for preventive interventions. Basic research has provided much information about the molecular processes involved in tumor progression and/or tumor spread and metastasis, but we do not yet have the data to apply these observations to patient management. In June, 1990 the Consensus Development Conference on Treatment of Early Stage Breast Cancer indicated that refinement of existing prognostic factors would depend on development and utilization of new and existing tissue and clinical data banks. The Cancer Diagnosis Branch has been exploring ways to assure that existing collections are effectively used. It has become apparent that the most efficient method would be to take advantage of the careful follow-up and monitoring of patients that is done in the context of clinical trials and in the major centers for cancer treatment.

In essentially all the clinical trials, paraffin blocks are prepared for pathologic review and confirmation of the diagnosis, but these blocks have not been readily available for retrospective studies. Pathologists are often reluctant to release the paraffin blocks for legal reasons. They also may not have the time or the personnel resources to locate and retrieve archived samples or to cut additional sections. Blocks are often dispersed throughout individual institutions rather than centralized in a coordinating center. Research institutions may have local priorities that restrict outside use of tumor specimens. These factors limit the creation of large specialized repositories of tumor samples with associated clinical data for definitive studies of prognostic indicators. The clinical trials groups have attempted to carry out protocols using tissues collected in therapeutic trials, but they have often been inhibited by the problems noted above.

A number of groups have potential access to large numbers of breast cancer archival specimens from patients treated consistently and for whom significant clinical and outcome data are available. These include clinical cooperative groups, community clinical oncology groups, cancer centers, and other major institutions involved in comprehensive treatment programs. While these groups accrue large numbers of patients and archive large amounts of surgical tissue, they often lack the resources to utilize those specimens in comprehensive way to evaluate promising predictive tissue markers. There is no complete record of the samples that might be made available for research and no mechanism to coordinate the efforts of these disparate groups.

Representatives from major organizations involved in breast cancer treatment and clinical trials met with NCI staff to discuss the need for and possible approaches to creation of a breast cancer tissue resource. They determined that there was a definite need for such resources, but recognized substantial barriers to their creation. Development of an archival tissue registry was suggested at a second meeting. The registry approach was seen as a way to allow groups that might otherwise be competing for resources to work collaboratively to improve tissue access. The registry would not require that tissues be placed in a central repository nor that pathologists give up control over the blocks they committed to the registry. The registry would create a comprehensive record of which tissues could be made available for marker validation studies.

The development of breast cancer tissue resources by NCI could have considerable impact on the development of cancer diagnostic and prognostic assays. A breast cancer registry would provide such a resource. Archival tissues would be the initial focus because large numbers of paraffin embedded formalin fixed tissues from earlier clinical trials already exist, because such tissues are easier to obtain and transport and because these archival tissues are routinely prepared in the standard practice of pathology.

Groups wishing to register tissues would have to agree to donate tissue for high priority research studies as identified by an elected committee of registry members, the steering committee, and to agree to participate on such a committee. An assumption of the registry concept is that the establishment of a large breast cancer tissue resource will make available the specimens necessary for large scale validation studies. The registry steering committee, in addition to approving studies, could act as a "catalyst" bringing together groups with tissues and groups with promising reagents that are ready for validation testing. NCI would help coordinate this process and would have a representative on the steering committee.

Appropriate studies may be supported in several ways. Funded researchers could request access to the tissues and clinical data required for their studies through the registry steering committee. Unfunded investigators would be able to apply to the registry steering committee for prior approval to use tissues in proposed studies and would thus strengthen significantly their investigator-initiated grant applications. NCI could directly encourage additional studies by issuing an RFA for clinical correlative studies of breast cancer. Finally, the institutions involved with the registry could qualify for the tumor tissue resources master agreement sponsored by the Cancer Diagnosis Branch, based on availability of specific subsets of tissue documented by the registry. The RFA approach would allow NCI to focus research in general areas interest, while the master agreement approach would allow NCI to work with the steering committee design and carry out studies of specific markers. The range of potential mechanisms for support of studies assures that the breast cancer registry will be productive.

Participants will be responsible for proposing methods for accessing the registry, how access will be controlled and what relationship would exist between registry members and the investigators proposing studies. They would also have to propose standards to determine which tissue blocks should be included in the registry and propose consistent approaches for identifying and preparing tissue from the collection. The Cancer Diagnosis Branch believes that the registry will prove attractive to the major organizations involved in breast cancer treatment and clinical trials and make available critical resources necessary to effectively and efficiently evaluate promising diagnostic and prognostic markers.

Identification and evaluation of molecular markers for pathological classification of human astrocytomas. Proposed RFA, \$1.2 million in first year funding, four to six awards, four years. Program director: James Jacobson.

Astrocytomas constitute one of the most common classes of CNS tumors. There are three major groups of astrocytic tumors. Tumors classified as glioblastoma multiforme, the most malignant type, are uniformly fatal with no effective therapy available. The least malignant are the well differentiated astrocytomas. Unless they are located in an essential part of the brain, these tumors are generally amenable to surgery and radiation therapy. The anaplastic astrocytomas are a diverse group of tumors intermediate between the well differentiated astrocytoma and the glioblastoma multiforme. About half the patients with anaplastic astrocytomas respond well to a combination of radiotherapy and chemotherapy. Using current diagnostic techniques, it is not possible to predict which patients with anaplastic astrocytomas will respond to treatment. It would be valuable to be able to identify subsets of patients so that effective treatment regimens could be selected for individual patients.

The use of three different astrocytoma classification schemes, all based on histological criteria, results in significant variation in tumor classification. In addition, classification of the anaplastic astrocytomas fails because, even within a single classification scheme, the clinical behavior of tumors placed within a grade is highly variable. There is also significant variation in the classification of tumors by different pathologists. Experienced neuropathologists may have difficulty classifying any individual tumor.

The inability of classification schemes to predict response to therapy suggests that there are biologically distinct subsets of tumors that cannot be distinguished morphologically. Therefore, there remains a need for uniform and unambiguous methods of tumor classification and diagnosis which will be of value in predicting the course of disease and guiding treatment decisions. Application of molecular genetic, cytogenetic and immunohistological techniques to studies of CNS tumors has begun to improve our understanding of tumor behavior and to identify biological subgroups within the anaplastic astrocytomas. Preliminary results from studies carried out by the Network and by other researchers have identified chromosomal alterations, immunohistochemically distinct cell populations, and changes in gene expression that may identify subsets of astrocytomas with different biological characteristics. Validation of the diagnostic and prognostic utility of these new molecular markers will provide clinicians with better tools for use in patient management.

There is a continuing need for more informative markers to help reduce the variability in the diagnosis and prognosis of astrocytomas and to better correlate diagnosis with therapeutic response. A growing body of knowledge suggests that molecular markers may have diagnostic and prognostic value in CNS tumors. This initiative will optimize the synergy resulting from collaborations among neuropathologists, clinicians, molecular biologists and statisticians in order to establish correlations between molecular markers and standard histopathologic classification, tumor progression and response to specific therapies. It will build on the experience of the previous network in promoting collaborations between investigators with complementary expertise who are applying new methodologies to the identification and validation of markers in CNS tumors.

The Network will carry out inter-institutional studies designed to continue the evaluation of these markers and the correlation of the markers with clinical parameters. These cooperative studies will facilitate the study of a variety of markers and optimize the use of rare tissue resources. The Network will coordinate data management and statistical analyses of combined data in order to optimize the chance of identifying a new, useful prognostic marker. Expansion of the network will increase the availability of patient resources and will enhance the technical capabilities of the network.

The funding of the Astrocytoma Network will again use the cooperative agreement mechanism, an assistance mechanism which allows NCI staff to provide logistical support for the complex

interactions among the funded institutions. The goals, procedures and experimental protocols for network activities are established by a coordinating committee consisting of project PIs and other research team members. NCI staff participation involves facilitation of the interactions of the participating institutions and coordination of the exchange of information between institutions to assure that project goals are met. The relationship established by the cooperative agreement mechanism will facilitate the use of rare tissue resources, will optimize the use of complementary expertise, and will maximize the statistical power of data analysis.

NCI Plans To Recompete Frederick Contracts, Expects RFP In March

NCI intends to recompete the contracts for management of the Frederick Cancer Research and Development Center. These contracts, currently worth a total of more than \$166 million, expire in 1994. The Institute plans to make an RFP available next March.

Following is the text of the announcement:

RFP NCI-7529

Title: Management and operation of the NCI Frederick Cancer Research and Development Center

NCI is seeking sources to perform research, operation and technical support, animal production, computer services, and scientific library services at the NCI Frederick Cancer Research and Development Center. The facility consists of approximately 100 buildings and structures on 69 acres in Frederick, MD. NCI intends to recompete this requirement which is presently being performed under five separate contracts as follows:

Research, Advanced BioScience Laboratories Inc.; Operations and technical support, Program Resources Inc.; Animal production, Harlan Sprague Dawley Inc.; Computer services, Data Management Services Inc.; Scientific library services, Data Management Services Inc. All contracts are anticipated to be cost type, either cost plus fixed fee or cost plus award fee. Anticipated beginning of new contracts is Sept. 26, 1994. Term of resulting contracts is anticipated to be 10 years. Current annual negotiated amount for the last year of each contract: Research, \$15,156,672; Operations and technical support, \$155,588,664; Animal production, \$3,522,562; Computer services, \$1,457,207; Scientific library services, \$985,476.

Announcement is intended to apprise all interested organizations of this future full and open competition opportunity. Further notice to be published, including RFP availability, in March.

Contracting officer: John Eaton

NCI-FCRDC Bldg 427, PO Box B Frederick, MD 21702-1201 301/846-1113

NIH Funding Strategies For FY 1993

NIH issued the following announcement regarding funding strategies for fiscal 1993:

These core principles will serve to guide Institutes and Centers (I/Cs) in their funding decisions on Research Project Grants (RPGs) in FY 1993. In general, these principles are similar to those developed for FY 1992.

Non-Competing RPGs:

1. The award of non-competing grants at committed levels is the cornerstone of the NIH Financial Management Plan and is the basis of our credibility with Congress and the scientific community.

2. Non-competing grants, on the average, cannot exceed 4 percent over the prior budget period, taking into account one-time, non-recurring costs such as equipment.

3. Every effort will be made to accommodate shifts in the NIH fiscal situation. If conditions are such that funding at the committed levels is not possible, the I/Cs will consult with the Deputy Director for Extramural Research, NIH, to determine an appropriate resolution.

Competing RPGs:

1. The average total cost of the cohort of competing grants in one fiscal year will not increase by more than the Biomedical Research and Development Price Index (BRDPI), 5.08 percent in FY 1993, over the cohort of competing grants in the previous fiscal year (including Small Business Innovation Research grants). Given the appropriation level for FY 1993, some I/Cs may not be able to provide an increase consonant with the BRDPI.

2. In making funding decisions, I/Cs should factor in the total costs of a grant, especially at the margin.

3. Budgetary reductions will be achieved through a combination of initial review and Council/Board recommendations, program and staff review for cost allowability and reasonableness, and programmatic adjustments, where necessary, to arrive at an appropriate funding level.

4. Adjustments made on the basis of initial review or Council/Board recommendations, or determinations of the allowability/reasonableness of costs, as well as programmatic adjustments to arrive at an award level will be specifically documented. These may include adjustments of specific budget items, reductions in investigator effort, or decreases in the number of specific aims. The I/Cs plans, i.e., general rationale and methodology, for programmatic adjustments will be based on considerations at the program level.

5. Award reductions of 25 percent or more below the IRG recommended level on a single grant application may require a revised statement of specific aims and a revised budget from the principal investigator, properly countersigned by the institution, which must be reviewed and approved by program and grants management staff. Program staff, in consultation with the principal investigator and grants management staff, will decide if a new statement of specific aims is required.

6. For competing continuation grants, one factor in arriving at the award amount will be the level of support in prior years and the extent to which the I/C can permit growth within the existing constraints on increases in average costs.

7. The average length of research project grants will be four years (excluding Small Business Innovation Research grants).

UICC Fellowships Available

The International Union Against Cancer (UICC) offers long, medium and short term fellowships to qualified cancer professionals who are actively engaged in cancer research, clinical oncology, or oncology nursing. These include:

--American Cancer Society International Cancer Research Fellowships, about 15 a year for original research abroad by recognized senior investigators who have been active in cancer research for at least five years; six to 12 months duration; average award value of \$30,000. Application closing date is Oct. 1, with selection by mid-April of the following year.

--Yamagiwa-Yoshida Memorial International Cancer Study Grants, about 15 a year for establishing bilateral research projects abroad that exploit complementary materials or skills, including advanced training in experimental methods; one to three months duration; average grant value of \$8,000. Application closing dates are Jan. 1 or July 1, with selection by mid-April or mid-October.

--International Cancer Technology Transfer, about 120 a year for qualified investigators and clinicians to learn or teach up to date research techniques, to transsfer appropriate technology, or to acquire advanced clinical management, diagnostic, and therapeutic skills; up to three months duration, average award value of \$2,800. Applications received at any time.

--International Oncology Nursing Fellowships, five a year for English-speaking RNs who are actively engaged in the care of cancer patients in their home institutes and who come from countries where specialist cancer nursing training is not yet widely available; one to three months duration; average award value of \$2,800. Application closing date Nov. 15, with selection results by mid-February.

Applications are available from the Fellowships Department, UICC, 3 rue Conseil General, 1205 Geneva, Switzerland. Phone 41-22 320-1811; fax 41-22 320-1810. Past fellows of the UICC fellowship program are invited to join the Assn. of UICC Fellows.