## THE LETTERINTERACTIVE

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## "Unique Experiment" In Tyrol May Suggest Value For PSA, Set Off Worldwide Debate

A paper about to be presented at the European Association of Urology annual meeting in Brussels reports a statistically significant decrease in mortality following introduction of mass screening with Prostate Specific Antigen in the Austrian state of Tyrol.

According to the Austrian and Italian team that conducted it, the Tyrol study is a "unique natural experiment," which compares prostate cancer mortality in Tyrol, where PSA screening was made available at no cost, with the rest of Austria, where it was not.
"Though compelling, the nature of the experimental design makes (Continued to page 2)

## In Brief:

Haber Receives AACR-NFCR Professorship; Tew Named To Pepper Chair At Fox Chase
DANIEL HABER, of Massachusetts General Hospital Cancer Center, received the American Association for Cancer Research and the National Foundation for Cancer Research Professorship in Basic Cancer Research for his work in cancer genetics. The two-year professorship, granted in honor of NFCR founders Franklin and Tamara Salisbury, carries a $\$ 100,000$ award and promotes research productivity by allowing researchers more time for their work. Haber specializes in the genetic predisposition of cancer and characterizing tumor suppressor genes involved in Wilm's tumor and its relationship to increased risk in breast cancer. . . . KENNETH TEW, a cancer researcher specializing in drug resistance, was named to the $\$ 1.5$ million G. Willing "Wing" Pepper Chair in Cancer Research by Fox Chase Cancer Center. A 1993 NCI sevenyear Outstanding Investigator Grant recipient, Tew headed the basic pharmacology program at Lombardi Cancer Center in Washington, DC, before joining Fox Chase in 1979. . . . G. TERRY SHARRER was elected chairman of the board for the National Foundation for Cancer Research. Sharrer, whose interests focus on the history of molecular medicine, is curator of health sciences at the Smithsonian Institution National Museum of American History. Two additional members were also named to the board: Lorie Karnath, senior vice president for the German Industrial Investment Council North American operations and Kevin Connolly, vice president of Global Asset Management for Citibank. Retiring chairman Martha Sager, former professor and chairman of American University Biology Department, will remain a board member.
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## Tyrol Study Doesn't Delineate Screening, Treatment Benefits

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the findings less conclusive than a randomized clinical trial," said Peter Boyle, the lead epidemiologist on the study and director of the Division of Epidemiology and Biostatistics at the Milan-based European Institute of Oncology.

Over five years starting in 1993, more that 76,000 Tyrolean men between ages 40 and 79 , about two thirds of the eligible population, were tested at least once. During those years, the number of prostate cancers diagnosed increased dramatically above what would have been ordinarily expected, while the number of prostate cancer deaths dropped below the forecast level.

Thus, in 1997, 175 cases of prostate cancer would have been expected, yet 318 cases were diagnosed. During the same year, 49 people would have been expected to die from the disease, but only 33 deaths occurred. In 1998, the most recent year for which mortality figures are available, 30 men died of the disease, 22 fewer than projected.

Before the study began, mortality from prostate cancer in Tyrol matched that of Austria. However, after PSA became available, prostate cancer mortality in the state began to drop more steeply than in the rest of Austria $(p=0.016)$.

It is unclear how much of the survival benefit

[^0]can be attributed to screening, and how much to treatment, which included radical prostatectomy and hormonal therapy of early disease, Boyle said.
"The data do not support getting [NCI Director] Rick Klausner to issue an edict that all men should have their PSA measured," Boyle said to The Cancer Letter. "However, these findings force us to think again, and think carefully about recommending PSA testing for the entire population."

Otis Brawley, a prostate cancer expert at NCI, said the data seem solid and the analysis appropriately cautious. "Overall, this is a good study, but in addition to a decrease in mortality, the data show an increase in the number of cancers diagnosed, demonstrating once again that screening detects some tumors that do not need treatment," Brawley said to The Cancer Letter. "We need to learn to delineate clinically significant tumors from those that are diagnosable but insignificant."

Prostate cancer patient advocacy groups in the U.S. have not demonstrated willingness to await conclusive evidence on PSA, and the Tyrolean data may strengthen their belief in screening.

Many advocates attribute decreasing prostate cancer deaths to PSA testing, and are unwilling to suspend judgment on PSA pending the outcome of the NCI-sponsored Prostate, Lung, Colon and Ovarian Screening Trial, which began in 1993 with the goal of accruing 150,000 people. That trial's conclusions are still many years away.
"Most of us in the prostate cancer advocacy community believe that PSA testing has played a role in bringing about the anticipated 14-percent reduction in prostate cancer deaths in the U.S.," said Richard Atkins, vice chairman of the National Prostate Cancer Coalition and president of CaP CURE Government Research Initiatives Group. "One in six men in America, those at risk of prostate cancer would demand a rapid resolution to the screening controversy-certainly much more rapid than that offered by PLCO."

The Tyrol study is undergoing peer-review at a medical journal, Boyle said. The results will be presented in Brussels April 15, in a keynote lecture by Georg Bartsch, professor of urology at the University of Innsbruck, principal author of the study. In the U.S., the study will be presented at the American Urological Association annual meeting in Atlanta later this month.

The American Cancer Society plans to convene a subcommittee immediately following the AUA
meeting to review the society's recommendations for prostate cancer screening, sources said.

In 1997, the results from two Swedish randomized trials, which showed a breast cancer survival benefit among women between ages 40 and 49 who received regular mammograms, led NIH to convene a "consensus conference" on screening for breast cancer. Though the conference concluded that the new data did not justify screening for younger women, Congress weighed in on the side of mammography, and ultimately NCI's National Cancer Advisory Board issued a statement that recommended screening every one to two years for women in their forties at average risk for breast cancer, and more often or earlier for women at higher risk of the disease.

It is unclear whether the results observed in Tyrol could be fully reproduced elsewhere, Boyle said. "The situation in Tyrol was helped by having highquality urology and appropriate treatment facilities present and available to the entire population," he said. "This is probably a pre-requisite for any populationbased prostate cancer screening program."

Mass prostate cancer screening in Tyrol began in 1993, spearheaded by Bartsch, who was trained at Johns Hopkins Medical School, where he became a believer in radical therapy for prostate cancer and in its early detection. After returning to practice in Innsbruck, Bartsch convinced the Tyrolean health agency to offer PSA testing to men between ages 45 and 75 .

Men with abnormal PSA were referred to physicians, while men whose PSA was normal were invited to repeat the test within a year. Thus, the mortality drop reported is likely to reflect the impact of screening, treatment, and getting more patients at a stage of the disease where treatment can make a difference.
"This reduction has probably taken place too quickly to be due to the diagnosis and treatment of early prostate cancer, but is likely to owe more to the anticipated hormonal therapy of moderately staged disease," Boyle said.

Study authors are: Georg Bartsch, Wolfgang Horninger, Helmut Klocker and Andreas Reissigl of the Department of Urology, University of Innsbruck; Wilhelm Oberaigner of the Tyrol Cancer Registry in Innsbruck; and Gianluca Severi, Chris Robertson, and Peter Boyle of the Division of Epidemiology and Biostatistics of the Milan-based European Institute of Oncology.

## In Congress:

## Senate Authorizes \$2.7 Billion Increase For NIH Budget

The Senate last week approved a $\$ 1.6$ billion increase for the NIH as part of a resolution authorizing a $\$ 1.8$ trillion federal budget for 2001.

The increase, added to a $\$ 1.1$ billion raise for NIH already allocated in the 2001 budget, would authorize a $\$ 2.7$ billion total increase for the Institutes. The amendment was introduced by Sen. Arlen Specter (R-PA), chairman of the Senate Labor, HHS, and Education Appropriations Subcommittee, and cosponsored by Sen. Tom Harkin (D-IA), the subcommittee's ranking member.

The budget resolution serves as a plan for Congress to follow in developing spending bills this year. The NIH budget stands at $\$ 17.8$ billion. The proposed increase would boost the NIH budget to more than $\$ 20$ billion.

The increase, if adhered to in the appropriations bill for NIH, would keep pace with the goal established by Specter, Harkin, and many cancer research advocacy organizations of doubling the NIH budget over five years, from 1998 to 2003. A Senate resolution to support the doubling was approved unanimously two years ago.
"The NIH is the crown jewel of the federal government," Specter said. "In fact, it may be the only jewel of the federal government. As a capital investment in the health of America, there is no better investment."

Prior to the Senate's approval of the amendment on April 7, a brief but heated debate erupted on the floor over an attempt by Budget Committee Chairman Pete Domenici (R-NM) to kill Specter's funding proposal. The Senate voted 54-46 in a roll-call vote to reject Domenici's amendment and went on to pass the NIH increase by voice vote.

In his budget proposal for 2001, President Clinton sought $\$ 18.8$ billion for NIH, an increase of $\$ 1$ billion or 5.6 percent. "By any measure, the amounts we received in FY 1999 and 2000, both nearly 15 percent increases, were dramatic and unprecedented," Acting NIH Director Ruth Kirschstein testified at Specter's subcommittee March 30. "These generous budgets have allowed us to undertake many new and important programs and to improve conditions throughout the medical research enterprise."

At the hearing, Specter asked Kirschstein and
the directors of the individual Institutes to tell the subcommittee what percentage of grant applications are considered meritorious and what it would cost to fund them. "The question I consistently get is, 'Is there too much money being thrown to NIH? Is NIH able to utilize the money which it has?," Specter said. "Then there's always the issue of how it's being spent, what is being produced and what could be produced with more."

Kirschstein said NIH overall funds about 26 to 28 percent of the research grant applications it receives. As funding for NIH has increased, however, the number of applications has increased, and NIH has been committed to raising the amount of funding provided to each grant recipient, she said.
"Can you give us an estimate, a judgment on how many of the balance of 74 percent which do not receive grants are meritorious and under ideal circumstances should receive grants?" Specter asked.
"We consider that about a third of all the grants, $33,34,35$ percent, would be an appropriate number to strive for," Kirschstein said. "However, the Institute directors and I have discussed this and in many cases, we feel that the number can go even higher, up to 40 percent or so, and this meritorious science would continue to be funded."

Specter asked how much would be required for NIH to fund 40 percent of the grant applications. Kirschstein promised to provide Specter a dollar amount.

Specter asked a series of funding questions of NCI Director Richard Klausner:

SPECTER: What is the current total funding for your Institute?

KLAUSNER: The current funding is $\$ 3.32$ billion.

SPECTER: What percent of grants do you award?

KLAUSNER: The success rate for grants will be 30 to 31 percent this year.

SPECTER: What's the total number of applications you have?

KLAUSNER: The total number of applications we've had this year is a little over 4,000 .

SPECTER: What percent would you like to grant, that are meritorious?

KLAUSNER: I think we would shoot for between 35 to 37 percent.

SPECTER: What would be the total funding necessary to make the grants that you would like to make?

KLAUSNER: In order to achieve that level of funding, we would require about a 20 percent funding increase.

## Speeding Application Of Research

Sen. Dianne Feinstein (D-CA) asked Klausner about speeding research findings to clinical use. "One of the things that I've become concerned about is the kind of disconnect that exists between discovery and application, from the laboratory to the bedside," she said. "Someone you know well, Dr. Helene Brown, from the UCLA Cancer Center, points out that the Pap smear was ready for widespread use in 1940, but was not really used until 1960.... How can we shorten this disconnect?"

KLAUSNER: One of the characteristic changes of the last few years has been an acceleration of translation of basic research into the clinic. Now the speed at which this happens varies tremendously depending upon what it is that you are trying to translate. For example, the discovery of a generic alteration that predisposes an individual to a particular disease, for example cancer, can translate incredibly rapidly into a useful and usable clinical test. In my own work with a tumor suppressor gene for predisposing to kidney cancer, that really took about a year from discovery to now be widely used in clinics to help predict and help families make decisions about surveillance and what to do about this particular predisposition syndrome. For the development of new therapies, that does take a long time. But I think many of the programs that have been developed with the new funding over the last few years, are actually being developed exactly aimed at speeding that transition. Let me give you an example. We established a program about one-and-a-half years ago called Rapid Access to Interventional Development. It's sort of a virtual national drug development system that reaches out to academic laboratories and funds new promising agents to move, we hope, within 12 months out of a laboratory into phase I clinical trials. And this is really very rapid. We' ve now experiences it for a little over a year, 32 novel agents have been funded. Four of them have actually already made it out of the laboratory, basic laboratories, into clinical trials. Each costing less than a $\$ 1$ million per drug. Its these sorts of programs that allow us to move things much more rapidly than we had before. And I think there are many more examples that all of us can give, but I think it really is a characteristic of the new technologies and new programs that we're all
developing that are aimed specifically at speeding that transition.

FEINSTEIN: Second question. I think you yourself pointed out the amazing extension of life that has been achieved through the juvenile protocol with cancer, where a juvenile with cancer can in fact really be assured throughout the nation of state-of-the-art cancer care. The same is not true for an adult and what we have found is that the state of cancer care throughout the nation is extraordinarily erratic. The need for every cancer patient to have a quarterback physician, for example, I think preferably an oncologist, somebody who is able to go through the options with them. To see that for their case, they have the best possible options. There is no real state-of-the-art care for the adult cancer patient. What is the Institute doing to try to bring that about and how might we be helpful in that regard?

KLAUSNER: You're right. I think pediatric oncology again is one of the real success stories of NIH of actually linking research to practice. Sixtyfive percent of children in this country who are diagnosed with cancer, regardless of their economic status, or ethnicity or race, are treated on NCI clinical trials and about 90 percent are treated on...protocols developed by our funded investigators, as opposed to 2 to 3 percent of adults. We believe that part of the reason there has been such progress in cure rates for childhood leukemia and childhood cancers-even without the development of major new drug advances-by improving protocols. One of the things that we've been doing to try to expand this to the adult is to revamp our clinical trials system, to turn it into a truly national system with a single Web-based informatic structure that allows any physician to access any of the 1,500 open adult clinical trials. This is new. It's actually just coming online this summer with a new national clinical trials organizational unit. But there's a lot that we need to do to try to open this, funding is limiting. With the increased funding there has been a significant increase in accrual just the past year, finally, of adults patients to clinical trials. What does that mean? One example in a recent adjuvant breast cancer trial, it was predicted it was going to take 38 months to just finish the accrual. It was over in 14 months. That means, just as we're saying, we can ask more questions more quickly. It is a direct reflection of the funding. There are other issues, and that is whether patients have access to clinical trials. The issue of whether for clinical care associated with clinical trials, there is reimbursement.

And that policies are in place to allow access, we think is another extremely important issue that needs to be addressed.

FEINSTEIN: Are you saying then that the only way to assure that every cancer patient in the US has state-of-the-art care is by access to clinical trials?

KLAUSNER: No, I don't think that's the only way, but I do think we need to expand the clinical trials system to generate more answers more quickly and I think there are a variety of ways that we can make sure that the results of the clinical trials and the expert protocols that are generated are more disseminated whether it is within or without a clinical trial.

## Science Policy: <br> Academies Report Hits Cut In Defense Research Budget

The Clinton Administration's proposed science and technology budget takes a major step toward balancing federal support among various research fields, but it could generate adverse consequences for some, according to a report from a committee of the National Academies of Sciences and Engineering and the Institute of Medicine.

The report analyzes the Administration's budget request for fiscal year 2001 now under consideration by Congress.

The proposed budget would increase the overall federal investment in the creation of new scientific knowledge and technology by $\$ 674$ million, up 1.3 percent from last year, to a total of $\$ 52.6$ billion.

However, minus the increases of 17.5 percent for the National Science Foundation and 3.7 percent for NIH, spending would actually drop 1.4 percent from last year due to the cut of 13.9 percent for the Department of Defense.
"The proposed budget gives a valuable boost to basic research investments through NSF, whose mission is to promote the progress of science and technology across all fields of research," said James Duderstadt, chair of the committee that wrote the report, and president emeritus and university professor of science and engineering, Millennium Project, University of Michigan, Ann Arbor.
"However, the abrupt reductions anticipated for the Defense Department could curtail important advances in physics, chemistry, engineering, and many allied fields," he said.

The Defense Department has been a major
sponsor of academic research in the physical sciences and engineering. The administration proposes to cut the department's efforts in advanced technology development by 18.5 percent and applied research by 9.6 percent.

In addition to potentially eroding U.S. global leadership in science and engineering, these downswings in funding levels could undermine the nation's capacity to recruit and train the next generation of scientists and engineers in certain fields, the committee concluded.

The analysis also said that sharp funding increases for biomedicine may strain the capacity of existing research facilities in some institutions and universities. Expanding programs may call for the construction of buildings and laboratories, which takes time and could overextend available services, the report said. Historically, federal funding has not adequately addressed the indirect costs incurred by research institutions when raising funds, training scientists, and building or maintaining facilities, the report said.

Copies of "Observations on the President's Fiscal Year 2001 Federal Science and Technology Budget" are available from the National Academy Press at phone 202- 334-3313 or 800-624-6242 for $\$ 15$, or may be downloaded at no charge from http:/ www.national-academies.org.

## NIH Programs:

## Pharmacogenetics Research

 Network Funded For \$12.8MNational Institute of General Medical Sciences, NCI, and other components of NIH have made grant awards for a program to understand how a person's genetic make-up determines the way a medicine works in his or her body, as well as what side effects the person might be prone to developing.

The trans-NIH effort is designed to forge an interactive research network of investigators who will store data in a shared information library freely accessible to the scientifc community.

Nine awards, totaling $\$ 12.8$ million for the first year of funding, have been made to:
-Stanford University School of Medicine, Russ Altman; $\$ 1.6$ million to house and operate the Stanford Pharmacogenetics Knowledge Base, which will serve as the shared information library for all scientists in the pharmacogenetics research network.
-Brigham and Women's Hospital, Jeffrey Drazen; $\$ 2.6$ million for a multicenter effort to discover which genes play a role in people's widely variable responses to the three main types of asthma treatments.
-Georgetown University Medical Center, David Flockhart; $\$ 1.3$ million to investigate if and how genetic differences between people can explain the variable responses to tamoxifen.
-University of California, San Francisco, Kathleen Giacomini; \$3.2 million to study how drug response is affected by variability in the genes that encode cellular gatekeeper molecules called membrane transporters, which interact with a third of the most commonly used prescription drugs.
-University of California, Los Angeles, Julio Licinio; $\$ 285,000$ for a one-year pilot project to search for genetic differences that play a role in how Mexican-Americans respond to two different antidepressant drugs.
-Yale University, Prakash Nadkarni; \$421,000 to develop and implement a Web-based database tool to incorporate existing pharmacogenetic knowledge into the PharmGKB information library.
-University of Chicago, Mark Ratain; \$2.5 million for a multicenter effort to examine how the benefits and toxic side effects of certain chemotherapy drugs vary among people.
-University of Houston Law Center, Mark Rothstein; \$322,000 to study the ethical, legal, and social implications of the use of pharmacogenetic information, paying particular attention to issues of race and ethnicity.
-The Mayo Foundation,Richard Weinshilboum; $\$ 576,000$ to search for variations in genes encoding proteins already known to be important in the body's handling and disposal of a wide array of medicines, hormones, and chemical messengers.

NIH has announced its intent to solicit applications for the next round of pharmacogenetics research network awards.

## Funding Opportunities: Leukemia Association Seeks Applicants For Grants

Application Receipt Date: June 30, annually
The National Leukemia Research Association Research Grant Program seeks applications from any M.D. or Ph.D. involved in leukemia research. Grants are limited to a maximum of $\$ 20,000$.

Inquiries: National Leukemia Research Association Inc., 585 Stewart Ave., Suite 536, Garden City, NJ, 11530, phone 516-222-1944.

## NCI Request For Applications

RFA CA-01-001: Lung Image Database Resource for Imaging Research

Letter of Intent Receipt Date: June 9, 2000
Application Receipt Date: July 14, 2000
NCI invites applications from investigators for its Lung Image Database Consortium that will develop consensus and standards for an image database resource and that will construct a database of spiral computed tomography lung images. The administrative and funding instrument to be used for this program will be a cooperative agreement U01, an assistance mechanism.

Inquiries: Barbara Croft,Biomedical Imaging Program, NCI, 6130 Executive Plaza, Rm 800, Bethesda, MD 20892; phone 301-496-9531; fax 301-480-5785; e-mail bc129b@nih.gov

## Program Announcements

PA-00-086: Molecular Epidemiology of HIVAssociated Cancers

Division of Cancer Control and Population Sciences of NCI and the National Institute of Dental and Craniofacial Research invite grant applications for interdisciplinary studies to better understand the molecular epidemiology and role of cofactors in the etiology of pre-neoplastic conditions and cancers occurring among persons infected with the human immunodeficiency virus, specifically those cancers associated with the DNA viruses, including human papilloma virus, Epstein Barr virus, and human herpes virus 8/Kaposi's sarcoma associated herpes virus. The PA will use NIH research project grant R01 and competing supplements to existing NCI and NIDCR funded R01 grants.

Inquiries: Sandra Melnick or Vaurice Starks, Division of Cancer Control and Population Sciences, NCI, Executive Plaza North, Rm 240, MSC 7395, Bethesda, MD 208927395, phone 301-402-9375; fax 301-402-4279; e-mail: vs38j@nih.gov

## PAR-00-087: Specialized Program of Research Excellence in Human Cancer for the Year 2001

Letter of Intent Receipt Dates:
Skin and Prostate Cancer SPOREs: Dec. 1, 2000
Gastrointestinal and Prostate Cancer SPOREs: April 1,2001

Brain, Head and Neck, Lymphoma, and Prostate Cancer SPOREs: Aug. 1, 2001

Application Receipt Dates:
Skin and Prostate Cancer SPOREs: Feb. 1, 2001
Gastrointestinal, and Prostate Cancer SPOREs: une 1, 2001

Brain, Head and Neck, Lymphoma, and Prostate

Cancer SPOREs: Oct. 1, 2001
The Organ Systems Branch of the Office of the Deputy Director for Extramural Science at NCI invites grant applications for Specialized Programs of Research Excellence in organ-specific cancers. Applicant institutions must be able to conduct the highest quality balanced translational research on the prevention, etiology, screening, diagnosis, and treatment of a specific organsite cancer. The PA will use the specialized center P50 grant mechanism.

Inquiries: Jorge Gomez, Organ Systems Branch, Office of Centers, Training, and Resources, Office of Deputy Director for Extramural Science, NCI, 6116 Executive Blvd., Suite 7008, MSC 8347, Rockville, MD 20852 (for express/courier service), Bethesda, MD 20892-7008 (for U.S. Postal Service), phone 301-496-8528; e-mail: jg1w@nih.gov

PA-00-083: Advanced Instrumentation for High Resolution Electron Microscopy

National Institutes of Health and the National Institute of General Medical Sciences support the application of electron microscopy to a broad range of problems in molecular and cellular biology. This PA, which will use existing NIH research project grant R01 award and program project grant P01 award mechanisms, addresses the need of basic research in molecular cell biology for more effective application of EM for the structural analysis of large macromolecular assemblies and for the imaging of macromolecules in cells.

Inquiries: James Deatherage, Division of Cell Biology and Biophysics, NIGMS, Building 45, Rm 2AS.13J, Bethesda, MD 20892-6200, phone 301-594-3828; fax 301-480-2004; e-mail: deatherj@ nigms.nih.gov

## PA 00-084: Techonology Development for High Resolution Electron Microscopy

National Institute of General Medical Sciences and other institutes invite applications for the technology of high resolution electron microscopy so that it can be applied together with complementary structural approaches for (1) routine determination of the atomic structures of isolated macromolecular assemblies and (2) the analysis of the spatial distribution of macromolecules in cells. The participating institutes are especially interested in promoting cross-disciplinary collaborations with established experts in fields of engineering, physics, mathematics, computer science, chemistry, and materials science. The PA will use existing NIH research project grant R01 and program project grant P01 mechanisms.

Inquiries: James Deatherage, Division of Cell Biology and Biophysics, National Institute of General Medical Sciences, Bldg. 45, Rm 2AS.13J, Bethesda, MD 208926200, phone 301-594-3828; fax 301-480-2004; e-mail: deatherj@nigms.nih.gov

PA-00-088: Earth-Based Research Relevant to the

## Space Environment

The purpose of this PA is to stimulate ground-based research on basic, applied, and clinical biomedical and behavioral problems that are relevant to human space flight or that could use the space environment as a laboratory. Applications may be submitted by foreign and domestic for-profit and non-profit organizations, public and private, such as universities, colleges, hospitals, laboratories, units of state and local governments, and eligible agencies of the Federal government. Racial/ethnic minority individuals, women, and persons with disabilities are encouraged to apply as principal investigators. The mechanism of support will be the individual research project grant R01.

Inquiries: Carol Shreffler, Program Administrator, Training and Career Development Programs, Division of Extramural Research and Training, National Institute of Environmental Health Sciences, P.O. Box 12233, Research Triangle Park, NC 27709, phone 919-541-1445; fax 919-541-5064; e-mail: shreffl1 @ niehs.nih.gov

## Neurofibromatosis Research Program Of The Defense Dept.

Fiscal Year 2000 Program Announcement Proposal Receipt Date: Sept. 6, 2000, 4 p.m. EST
The central theme of the NFRP is to support peerreviewed innovative research working toward the understanding, diagnosis, and treatment of neurofibromatosis, as well as enhancing the quality of life for persons with the disease. Approximately $\$ 12.4$ million of the neurofibromatosis program, administered by the U.S. Army Medical Research and Materiel Command through the Congressionally Directed Medical Research Programs, will be available to fund the research.

The programmatic strategy is to fund proposals in four research award mechanisms: Idea, New Investigator, Investigator-Initiated Research, and Clinical Trial Awards.

Detailed descriptions of each award mechanism, evaluation criteria, and proposal submission requirements can be downloaded from the CDMRP web site at http:// cdmrp.army.mil/?/announce/

## In Brief: <br> Group Says Gene Therapy Science Needs More Work

(Continued from page 1)
AMERICAN SOCIETY OF HUMAN
GENETICS board of directors released a statement affirming that gene therapy holds great promise as one potential approach to the treatment of genetic disease, but cautions that much more work is required to make it a routine, safe and effective procedure. The statement concluded that both the lack of progress
and the safety issues relating to gene therapy clinical trials to date have resulted from an incompletely developed scientific base, and an under-appreciation for the extensive experimental work in gene delivery and gene expression that would be required to make it safe and effective. The ASHG statement also registered concern about potential conflicts of interest on the part of gene therapy researchers and their institutions. The complete statement can be found under policy statements on the ASHB website: http:/ www.faseb.org/genetics. . . . PRESIDENTIAL EARLY CAREER AWARDS, the highest honor conferred by the U.S. government to young professionals at the beginning of their research careers, were presented by President Clinton in a White House ceremony April 13. "We honor these outstanding young scientists and engineers for their research contributions, for their promise, and for their commitment to broader societal goals," President Clinton said. "They will do much to shape our society and advance our national interests in the twenty-first century." The up to five-year research grant, established in 1996, supports study time for critical government missions. Eight federal departments and agencies join together annually to make the nominations. The NIH/HHS recipients are: Linda Barlow, University of Denver; Annelise Barron, Northwestern University; Carolyn Bertozzi, University of California, Berkeley; Janean Holden, University of Illinois at Chicago; Judith James, Oklahoma Medical Research Foundation, Oklahoma City; Cecilia Moens, Fred Huchinson Cancer Research Center, Seattle; Marina Picciotto, Yale University School of Medicine; Geraldine Seydoux, Johns Hopkins University School of Medicine; Ida Sim, University of California, San Francisco; Ronald Summers, Warren Grant Magnuson Clinical Center, NIH; David Russell, University of Washington; Weidong Wang, National Institutes of Health; Xiaoquin Wang, Johns Hopkins University. . . . CANCER THERAPY AND RESEARCH CENTER received a $\$ 3$ million gift from the Charles and Betty Urschel foundation to name one of the new buildings of the CTRC campus in the South Texas Medical Center in San Antonio. The gift is part of an overall $\$ 35$ million CTRC Capital Campaign launched earlier this year. To date, over $\$ 19$ million has been raised. . . . CANCER MEETINGS: The Cancer Letter's list of upcoming oncology-related meetings worldwide is located on the Web at http:// www.cancerletter.com/documents.html\#top.

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    Founded Dec. 21, 1973, by Jerry D. Boyd

